Series of SDG Webinars for the Arab Region:
FAO
SDG 2.1.1, 2.1.2, 2.4.1, 2.5.1, 2.5.2, 2.a.1, 2.c.1, 6.4.1, 6.4.2, 14.4.1, 14.7.1, 15.1.1 and 15.2.1

An Interagency and Experts Collaboration to Improve the Production and Dissemination of SDG Indicators from Official National Sources

26 April to 6 May 2021

Report of the Meeting

Contents

BACKGROUND

The need to improve the production and dissemination of reliable comparable and timely data on SDG

In September 2015, the United Nations General Assembly adopted by consensus Resolution 70/1: Transforming our world: the 2030 Agenda for Sustainable Development (the 2030 Agenda). The Resolution reaffirms the need for the strengthening of national data systems through "collaboration between national statistical systems and the relevant international and regional organizations to enhance data reporting channels and ensure the harmonization and consistency of data and statistics for the indicators used to follow up and review the Sustainable Development Goals and targets".

The resolution also urges countries, the specialized agencies, the regional commissions, and the Bretton Woods institutions among others "to intensify their support for strengthening data collection and statistical capacity-building, including capacity-building that strengthens coordination among national statistical offices". Moreover, the resolution "Urges international organizations to base the global review on data produced by national statistical systems and, if specific country data are not available for reliable estimation, to consult with concerned countries to produce and validate modelled estimates before publication, urges that communication and coordination among international organizations be enhanced in order to avoid duplicate reports, ensure consistency of data and reduce response burdens on countries, and urges international organizations to provide the methodologies used to harmonize country data for international comparability and produce estimates through transparent mechanisms;"

Five years after the adoption of the 2030 Agenda several countries are facing considerable challenges in monitoring targets in many policy areas. The current COVID-19 pandemic highlights the value of measuring and monitoring: no strategy can be developed, and no measure can be implemented without a proper monitoring and evaluation system.

Many countries in the Arab region are reporting on SDG indicators, however, reporting on progress on many of the SDG indicators, remains limited in the region. Insufficient availability and quality of statistical information on SDG indicators hamper the capacity of policymakers to generate evidence-based and effective policy responses and implement the 2030 Agenda.

Translating these recommendations and resolutions into tangible results is imperative and will require intensive collaboration at the national, regional and global levels. Regional Commissions' Statistical bodies "are the nexus between the Statistical Commission at the global level and the implementation at the national level of the norms endorsed by the Commission. In the context of the 2030 Agenda, the support provided by the regional commissions to assist Member States in adapting, implementing and measuring progress towards the implementation of national development plans is of particular significance as it influences the quality of statistics and methodologies used, as well as the use of new and innovative methodologies and sources of data, known as the transformative agenda for official statistics. The regional commissions carry out activities to strengthen the capacity of Member States to produce, use and dissemination official statistics and also provide a regional platform for sharing experiences and practices in statistics work[1]."

1 Source: Relevance and effectiveness of the statistical work of regional commissions - thematic evaluation of regional commissions, Committee for Programme and Coordination, 57th session, April 2017 (E/AC.51/2017/8)

Interagency and Experts Collaboration- ESCWA & FAO

In this context, the Economic and Social Commission for Western Asia (ESCWA) implemented an assessment of data disseminated through the UNSD SDG Global database and those in national SDG official sources to identify those less produced, disseminated, or less understood by national statistical offices (NSOs), and are more available in UN Agencies' and UNSD databases.

Based on the assessment results, ESCWA in collaboration with FAO met on 18 March 2021 to discuss the organization of a joint webinar to build capacities of Arab countries to produce and disseminate indicators 2.1.1, 2.1.2, 2.4.1, 2.5.1, 2.5.2, 2.a.1, 2.c.1, 6.4.1, 6.4.2, 14.4.1, 14.7.1, 15.1.1 and 15.2.1.

OBJECTIVE- WHY?

ESCWA and FAO organized jointly a series of webinars on selected SDG indicators that are less produced/disseminated in the Arab region to create a common understanding among data producers on how to collect, measure and disseminate SDG indicators to increase data availability and enhance national data flow to national policy makers, regional users including the custodian agency.

The main objectives of the webinars are:

- Enhancing understanding of metadata and nature of data in the UNSD SDG database.
- Improving statistical capacities to invigorate production and use of comparable SDG indicators.
- Strengthening inter-institutional coordination to invigorate production of SDG indicators and data flow.
- Sharing and discussing country challenges in measuring SDG indicators.

TARGET AUDIENCE - WHO?

The meeting was attended by 115 representatives from 18 national statistical offices and line ministries, namely: Algeria, Bahrain, Comoros, Egypt, Iraq, Jordan, Kuwait, Lebanon, Morocco, Mauritania, Oman, Qatar, State of Palestine, Saudi Arabia, Sudan, Somalia, Tunisia and UAE. The meeting was also attended by World Food Program, UN-Women and UNRCO representatives.

SCHEDULE AND LANGUAGE– PLATFORM?

The regional training was held from 26 April to 6 May 2021 from 10 A.M. to 1 P.M. on Zoom (Agenda attached), with simultaneous interpretation in both English and Arabic languages.

OUTCOME- FINDINGS AND RECOMMENDATIONS

The participants from NSOs and other relevant stakeholders were familiarized with concepts, methods including data flow and dissemination channels. The webinar encouraged interactive dialogue and participants were invited to share national experiences in data collection and dissemination including challenges and concerns. Presentations to the meetings were made available in the Arabic and English languages. A record of the discussions is provided in Annex on Q&A of this report. The full webinar proceedings were recorded to develop training materials.

The SDG monitoring framework - Roles of countries and FAO as custodian agency

The 2030 Agenda sets in place a global reporting structure that includes inputs at local, national, regional levels and culminates in the UN High-Level Political Forum. SDG indicators are the foundation of this global monitoring framework for mutual accountability of custodian agencies, countries and all stakeholders. The success of the sustainable development goals rests to a large extent on an effective monitoring, review and follow-up process.

FAO is the custodian agency for 21 SDG indicators and contributes to five additional indicators. Countries have committed to report on SDG indicators as per their priorities and national targets.
In January 2018, a Conference of National Reporting and Dissemination Platforms took place and agreed on Principles of SDG Indicator Reporting and Dissemination Platforms2: Countries should establish their own path responding to their specific needs, create a community of collaboration among national data stakeholders; Countries should not be pushed towards specific solutions; and International partners should seek an integration of their efforts. It is therefore important to maintain consistency and coherence between the SDG data reported on the global SDG database and on national reporting platforms (e.g. clearly differentiate between SDG indicators and national proxies). This process will facilitate provision for Custodian Agencies to provide technical support to countries and implement assessments including preparation of reports.

FAO is responsible of assessing capacity gaps, providing technical support (e-Learning courses and national, regional and global workshops), and facilitating assessments and reporting. FAO collect data from national sources, carry out quality assurance, consistency and comparability, and estimate regional and global aggregates. When there are data gaps or the quality of data is weak, FAO makes estimates and consult with countries in order to make adjustments before the data dissemination. To support this process FAO recommends that countries enhance their coordination and establish a statistical governance to ensure flow of quality data. FAO also make available data portals, dashboards and eLearning platforms to enhance capacities for better data production and dissemination.

ESCWA and FAO partnership including other international bodies/organizations aims to provide support to countries in: Improving statistical capacities to produce, use and disseminate high quality official statistics and SDG data; adapting, implementing and measuring progress towards the implementation of national development plans; enhancing national inter-institutional coordination to invigorate the production of SDG indicators; monitoring the indicators and coordinating efforts (at regional and global level), to align with regional SDG indicators frameworks and to achieve interrelated goals.

2.1.1 Prevalence of undernourishment

The prevalence of undernourishment (PoU) is an estimate of the proportion of the population whose habitual food consumption is insufficient to provide the dietary energy (Kcal) levels that are required to maintain a normal, active and healthy life. An individual is considered to be undernourished if the level of

2 https://unstats.un.org/unsd/statcom/49th-session/documents/BG-Item3a-NRDP-E.pdf

her/his habitual dietary energy intake is below the minimum dietary energy requirement that assumed to be appropriated by nutritionists.

The ideal source of data to estimate the PoU would be a carefully designed and skillfully conducted individual dietary intake survey, in which actual daily food consumption, together with heights and weights for each surveyed individual, are repeatedly measured on a sample that is representative of the target population. Due to their cost, however, such surveys are rare.

In practice, it is often possible to rely on data collected through a household survey such as such as Household Income and Expenditure Surveys (HIES), Household Budget Surveys and Living Standard Measurement Surveys. Household surveys provide micro data on food consumption quantities (the first two parameters out of the three)[3]. however, there are no country data available in the UNSD global database. Instead an estimation has been made for 13 countries using the food balance sheets. Official information on food commodity production, trade and utilization used by FAO to compile Food Balance Sheets is provided mainly by Statistical Units of the Ministry of Agriculture. FAO sends out a data collection questionnaire every year to an identified focal point. Microdata of household surveys are provided to FAO by National Statistical Offices. Data on the population size and structure for all monitored countries is obtained from the UN Population Division's World Population Prospects.

None of the Arab Countries have disseminated any country data in the UNSD SDG database. Although, the data are being estimated for 13 countries, three countries namely Egypt, Iraq and Morocco have disseminated national data that do not match the estimated data.

Indicators	UNSD SDG database (C-CA)	UNSD SDG database (E-M-N-NA-G)	SDG in national report
2.1.1 Prevalence of undernourishment	0	13 (E)	E ≠ Egypt, Iraq, Morocco

C: country data, CA: country adjusted data, E: estimated data, G: global monitoring data, M: modeled data, N: non-relevant data, NA: data nature not available, NA: data nature not available as presented in UNSD SDG database, ≠: National data is not equal to Estimated data

Recommendations for Countries:

- Countries provide future plans to implement HIES to ESCWA and FAO.
- Countries implementing HIES request technical capacity development from FAO to calculate the indicator from HIES and/or for updating their food balance sheets.
- Countries apply standardized methodologies in the production of the PoU model in household surveys.
- Countries are requested to provide FAO with information on the microdata of their recent implemented household income and expenditure surveys if they have not yet done, and promptly once these surveys are completed.
- Countries advised

[3] Household Survey food consumption data often must be integrated by a) Data on the demographic structure of the population of interest by sex and age; b) Data or information on the median height of individuals in each sex and age class; c) Data on the distribution of physical activity levels in the population; d) Alternative data on the total amounts of food available for human consumption, to correct for biases in the estimate of the national average daily dietary energy consumption in the population.

Recommendations for ESCWA/FAO:

- FAO to provide a capacity development training to countries implementing HIES.
- ESCWA will coordinate with FAO plan for building capacities of national HIES in the Arab countries.

2.1.2 Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES)

The indicator measures the percentage of individuals in the population who have experienced food insecurity at moderate or severe levels during the reference period. It measure the range from being concerned about the ability to obtain enough food, to the need to compromise on the quality or the diversity of food consumed, to being forced to reduce the intake of food by cutting portion sizes or skipping meals, up to the extreme condition of feeling hungry and not having means to access any food for a whole day. The severity of the food insecurity condition as measured by this indicator thus directly reflects the extent of households' or individuals' inability to regularly access the food, they need within a one-year reference period.

Data can be collected using the Food Insecurity Experience Scale survey module (FIES-SM) developed by FAO, or any other experience-based food security scale questionnaires adapted against the global FIES. The FIES-SM can be included in virtually any telephone-based or personal interview-based survey of the population, though face to face interview is preferred.

Data at the individual or household level is collected by applying an experience-based food security scale questionnaire (FIES) within a nationally representative survey. The FIES survey individual/household module is composed of eight questions with simple dichotomous responses ("yes" or "no") – see Box1. Two versions of the FIES-SM are available for use in surveys of individuals or households respectively, and the difference stands in whether respondents are asked to report only on their individual experiences, or also on that of another member of the household.

Only three Arab countries have data in UNSD SDG Global database as nature "Country Adjusted" namely, Morocco, State of Palestine and Sudan. Data for six more countries are also available in the UNSD SDG database as nature "Global". The State of Palestine has disseminated national data equal to the Country Adjusted data in the UNSD SDG database. Egypt reports on this indicator, however, the data is not provided as country data in the UNSD SDG database.

Indicators	UNSD SDG database (C-CA)	UNSD SDG database (E-M-N-NA-G)	SDG in national report
2.1.2 Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES)	3 (CA): Morocco, State of Palestine, Sudan	2 (NA): Morocco, State of Palestine 6 (G): Algeria, Egypt Kuwait, Libya, Mauritania, Tunisia	CA = State of Palestine G ≠ Egypt

C: country data, CA: country adjusted data, E: estimated data, G: global monitoring data, M: modeled data, N: non-relevant data, NA: data nature not available, NA: data nature not available as presented in UNSD SDG database, =: National data is equal to Country adjusted data, ≠: National data is not equal to Global data

Box 1 - The FIES survey individual/household module

Q1. During the last 12 MONTHS, was there a time when you (or any other adult in the household) were worried you would not have enough food to eat because of a lack of money or other resources?

Q2. Still thinking about the last 12 MONTHS, was there a time when you (or any other adult in the household) were unable to eat healthy and nutritious food because of a lack of money or other resources? you would not have enough food to eat because of a lack of money or other resources?

Q3. And was there a time when you (or any other adult in the household) ate only a few kinds of foods because of a lack of money or other resources?

Q4. Was there a time when you (or any other adult in the household) had to skip a meal because there was not enough money or other resources to get food?

Q5. Still thinking about the last 12 MONTHS, was there a time when you (or any other adult in the household) ate less than you thought you should because of a lack of money or other resources?

Q6. And was there a time when your household ran out of food because of a lack of money or other resources?

Q7. Was there a time when you (or any other adult in the household) were hungry but did not eat because there was not enough money or other resources for food?

Q8. Finally, was there a time when you (or any other adult in the household) went without eating for a whole day because of a lack of money or other resources?

Recommendations for Countries:

- Countries to implement pilot testing of the terms to ensure adapting terms to local language.
- Countries to implement the Food Insecurity Experience Scale survey module (FIES-SM) either through a household survey or mobile survey.
- Countries to request training from FAO, if needed.

Recommendations for ESCWA/FAO:

- FAO to implement national consultation to validate the data and resolve any discrepancy issues
- FAO to provide country examples of mobile scripts/application surveys to implement at country level.
- ESCWA follow up and coordinate with countries to increase production and availability of national data in UNSD data and National data.

2.4.1 Proportion of agricultural area under productive and sustainable agriculture

It is a newly developed indicator finalized in 2019 and, therefore, no country has reported on it yet.

Indicators	UNSD SDG database (C-CA)	UNSD SDG database (E-M-N-NA-G)	SDG in national report
2.4.1 Proportion of agricultural area under productive and sustainable agriculture	0	0	

C: country data, CA: country adjusted data, E: estimated data, G: global monitoring data, M: modeled data, N: non-relevant data, NA: data nature not available, NA: data nature not available as presented in UNSD SDG database

Given this context, FAO has accelerated its efforts to provide technical assistance and training to countries to support them report on SDG 2.4.1 in the medium to long term. Briefly, the indicator is measured by identifying the area under productive and sustainable agriculture (captures environmental, economic and social dimensions) divided by agricultural land area measured in hectares (includes arable, crops and land under permanent meadows and pastures only4). From land tenure perspective it should be include areas of the holding that are owned and used or operated on, it can be rented in, or other land (occupied, borrowed for free, including common land managed exclusively by the holding)5.

Non-household sector agriculture holding commonly refers to large scale commercial holdings which are either owned by the family, government or by corporate or by group of individuals as per definition of The World Census of Agriculture 2020. The sample size is defined as the subset of agriculture holdings, the areas of which are representative of the country agriculture land area, country decide on the minimum sample size to be included ensuring adequate representation of the country agriculture land area. The data is compiled through FAO questionnaire module, that consists of a set of minimum questions, available online in English, French, Spanish and Arabic. Countries may include this module in their agriculture survey and refer to FAO guidelines on sampling.

The indicator measures structural phenomena and practices that do not change much from one year to another. To minimize data collection and reporting burden, it is therefore recommended that qualitative information is collected through face-to-face farm survey questions at least every three years. The 11 sub-indicators are measured, analyzed and based on set of predetermined criteria sustainability levels are assigned, the aggregate indicator is then derived from 11 sub-indicators. The framework of SDG 2.4.1. is shown in the table below:

	Theme	Sub-indicators
1	Land productivity	Farm output value per hectare
2	Profitability	Net farm income
3	Resilience	Risk mitigation mechanisms
4	Soil health	Prevalence of soil degradation
5	Water use	Variation in water availability
6	Fertilizer risk	Management of fertilizers
7	Pesticide risk	Management of pesticides
8	Biodiversity	Use of biodiversity-supportive practices
9	Decent employment	Wage rate in agriculture
10	Food security (similar to 2.1.2)	Food insecurity experience scale (FIES)
11	Land tenure (similar to 5.a.1)	Secure tenure rights to land

4 Excludes: Land under farm buildings and farmyards; Forest and other wooded land; Area used for aquaculture; Area used for aquaculture; and Other area not elsewhere classified.
5 Excludes: Owned and rented-out.

Each of the sub-indicators follow a different method of calculation and criteria (traffic light) to sustainability based on a set of thresholds such as: Green (desirable), Yellow (acceptable), and Red (unsustainable).

If an indicator is not applicable countries can skip the question, and consider the value as Green, for example country x does not use fertilizers and uses only organic fertilizers and also does not use pesticides, this means the sub-indicators 6. Fertilizer Risk and 7. Pesticide risk are both coded Green because the country is not contributing to environmental degradation. Indicator 10. Food insecurity is a tailored SDG 2.1.2 in the context of SDG 2.4.1 and it includes the set of eight questions for assessing the level of severity of food insecurity in a country. If a country collects data for SDG 2.1.2 at national level and implement agriculture surveys representing households adequately then it is recommended to add the survey questions related to the below qualitative replies:

Items	Variables label	Variable content	Domains of the food insecurity	Assumed severity of food insecurity
1	Worried	Felt anxiety about having enough food at any time during the previous 12 months	uncertainty and worry about food	Mild
2	Healthy	Not able to eat healthy and nutritious food because of lack of money or other resources to get food	inadequate food quality	Mild
3	Fewfood	Consumed a diet based on only few kinds of foods because of lack of money or other resources to get food	inadequate food quality	Mild
4	Skipped	Did not eat breakfast, lunch or dinner [or skipped a meal] because there was not enough money or other resources to get food	insufficient food quantity	Moderate
5	Ateless	Ate less than they thought they should because of lack of money or other resources to get food	insufficient food quantity	Moderate
6	Runout	Household ran out of food because of lack of money or other resources to get food	insufficient food quantity	Moderate
7	Hungry	Felt hungry but didn't eat because there was not enough money or other resources for food	insufficient food quantity	Severe
8	Whlday	Went without eating for a whole day	insufficient food quantity	Severe

FAO collects data from national statistical offices through a FAO data collection questionnaire designed for this purpose and disseminates data on the set of sub-indicators together but independently in the form of a dashboard at a national level. The dashboard presents country response in terms of measuring sustainability at farm level and aggregating it at national level. The visualization performance by each dimension provides decision makers with a user-friendly tool to identify issues and needed policies to improve situation in terms of sustainable development and provides an overall picture for 11 sub-indicators using agriculture surveys and other data sources including administrative records, census and remote sensing (provided if these additional sources of information comply with the set of conditions provided in the methodological note).

Recommendations for Countries:

- NSOs plan to implement farm surveys every 3 years and include questions to calculate the indicator
- NSO to request FAO for capacity development for planned agriculture surveys, where needed.

Recommendations for ESCWA/FAO:

- FAO make Enumerator manual available in the Arabic language to facilitate training of field workers
- FAO to provide training on methodology of collection and calculation.
- ESCWA to coordinate with NSOs and FAO on planned surveys.

2.5.1a Number of plant genetic resources for food and agriculture secured in either medium- or long-term conservation facilities

Genetic resources for food and agriculture (GFRA) are the building blocks of food security. GFRA provide adaptability and resilience in the face of climate change, emerging diseases, pressures on feed and water supplies, evolving agricultural systems, shifting market demands. No country is self-sufficient when it comes to GFRA and in fact all countries depend on genetic resources that originated elsewhere.
Plant diversity can be conserved *in situ*, which is particularly the case of wild food plants, on farm and *ex situ*. The first two methods allow the evolution of these crops as there is a continuous interaction between the crops and the environment. *Ex situ* conservation occurs outside the plant natural habitat, in gene banks, which is the focus of indicator 2.5.1a.

The data reporting process is done annually through the World Information and Early Warning System for plant genetic resources (WIEWS) platform by the National Focal Point appointed by the government. The National Focal Point collects data from relevant stakeholders, completes a reporting form in an excel file downloaded from WIEWS, and sends the excel file to FAO. This process undergoes a quality control check before the final data are published. WIEWS provides a function to calculate the indicator and generates visualizations that users can download for reporting and analysis.

The data collected on WIEWS includes information on the level of accession for both base collections and active collections, paying due attention to avoid double reporting. The following descriptors are mandatory for reporting on the plant component of indicator 2.5.1.a: the holding institute code/name; the accession number, a unique identifier of the accession within the collection; the name of taxon; and the type of germplasm storage. So far, only eight countries out of the 22 Arab countries have reported to FAO annually on this indicator since 2017, namely: Egypt, Jordan, Lebanon, Libya, Mauritania, Morocco, Sudan and Tunisia. Although the data for these countries are labelled as country data, none of them have disseminated any national data on their Voluntary National Reports (VNRs), SDG dashboards and reports. Bahrain, on the other hand, without reporting to FAO, has published national data on this indicator in their national SDG platform/report.

Country Experience:
Lebanon has reported on this indicator in the past three years. All information is accurate and updated on a regular basis.
In Morocco, there a set of indicators that are produced at the sector level and are sent to the Statistics Department to be incorporated in the VNR. The first draft of the VNR is usually shared with different sectors for validation.

Introduction

The data collection process is continuously through the Domestic Animal Diversity Information System (DAD-IS), FAO's communication and information tool for implementing strategies for the management of animal genetic resources. FAO invites countries to nominate a National Coordinator for Animal Genetic Resources to report on activities related to the management of animal genetic resources The National Coordinator will act as a focal point to collect data, enter data into DAD-IS and maintain communication and flow of information with all stakeholders. The DAD-IS generates the calculation and graphical presentations for each element of SDG indicator 2.5.1 and 2.5.2 at the country, region and global levels. Data entered by the National Consultant is thus considered as country data in the UNSD SDG database.

2.5.1b Number of animal genetic resources for food and agriculture secured in either medium- or long-term conservation facilities

The indicator refers to the number of local breeds reported in one country with sufficient material stored in a gene bank to reconstitute the breed in case of extinction. Material is cryoconserved which means deep-freezing of semen, embryos, oocytes (immature eggs) and other types of tissues in liquid nitrogen. Therefore, countries with no genetic conservation facility cannot achieve the respective target but still have to report on the indicator (no material stored)..

In the Arab region, out of 359 local breeds (including extinct ones), only 1.1% were reported with sufficient material collected, 0.8% with no sufficient material collected, 43.2% were with no material collected, and 54.9% were with no information.

Ten out of 22 Arab countries has reported on this indicator in DAD-IS since 2015, namely Algeria, Comoros, Djibouti, Iraq, Lebanon, Morocco, Oman, Sudan, Tunisia, Yemen. Data for 13 countries have been disseminated as country data in the UNSD SDG database. However, none of these countries have disseminated their national data in SDG reports and VNRs, nor in their SDG dashboards.

Indicators	UNSD SDG database (C-CA)	UNSD SDG database (E-M-N-NA-G)	SDG in national report
2.5.1 Number of plant and animal genetic resources for food and agriculture secured in either medium-or long-term conservation facilities	13 (C): Comoros, Djibouti, Egypt, Iraq, Jordan, Lebanon, Libya, Mauritania, Morocco, Oman, Sudan, Tunisia, Yemen	12 (E)	

C: country data, CA: country adjusted data, E: estimated data, G: global monitoring data, M: modeled data, N: non-relevant data, NA: data nature not available, NA: data nature not available as presented in UNSD SDG database

2.5.2 Proportion of local breeds classified as being at risk of extinction

This indicator presents the percentage of local livestock breeds among local breeds with known risk status classified as being at risk of extinction, at a certain moment in time, as well as the trends for this percentage. The risk classification is based on the population size of a breed, generally it can be said that the lower the number of animals belonging to a certain breed, the higher the risk it will go extinct. This indicator refers to local breeds available in only the reporting country.

The Commission on Genetics Resources for Food and Agriculture approved 7 risk categories: Unknown (population data is unavailable or more than 10 years old); Not at risk (no risk of extinction); Vulnerable (medium risk); Endangered (high risk); Critical (very high risk); Cryoconserved only (no breeding males or females remain, but sufficient material is available to reconstitute the breed); and Extinct (no breeding males or females remain, not enough cryoconserved material available). The indicator summarizes the classes vulnerable, endangered and critical under "at risk". Cryconserved only and extinct are not considered under indicator 2.5.2.

The main source of population size data and therefore for risk classification is Livestock Censuses on breed level. However other sources include Breeders associations, household surveys, including Key-informants and rapid appraisals. Annual updates are recommended.

Only four countries out of the 22 Arab countries have reported on this indicator, namely Algeria, Comoros, Jordan, Oman. Eight countries with at least 1 local breed updated over the last 10 years on the DAD-IS platform, namely Algeria, Libya, Mauritania, Morocco, Oman, Sudan, Tunisia, Yemen. However, none of these countries have reported on this indicator in their national VNRs and SDG dashboards and reports.

Out of the 348 local breeds (excluding extinct ones), 57 breeds were reported as not at risk and 17 at risk.

Indicators	UNSD SDG database (C-CA)	UNSD SDG database (E-M-N-NA-G)	SDG in national report
2.5.2 Proportion of local breeds classified as being risk of extinction	4 (C): Algeria, Comoros, Jordan, Oman	12 (E)	

C: country data, CA: country adjusted data, E: estimated data, G: global monitoring data, M: modeled data, N: non-relevant data, NA: data nature not available, NA: data nature not available as presented in UNSD SDG database

2.a.1 The agriculture orientation index for government expenditure

The Agriculture Orientation Index (AOI) for Government Expenditures is defined as the Agriculture share of Government Expenditure, divided by the Agriculture value added share of GDP, where Agriculture refers to the agriculture, forestry, fishing and hunting sector. The measure is a currency-free index, calculated as the ratio of these two shares. National governments are requested to compile Government Expenditures according to the Government Finance Statistics (GFS) and the Classification of the Functions of Government (COFOG), and Agriculture value added share of GDP according to the System of National Accounts (SNA).

Data for the denominator are annually collected from countries using the FAO questionnaire on Government Expenditure on Agriculture (GEA), developed in collaboration with the IMF. Data from

countries may be supplemented, for countries with missing information, with data collected by the IMF, or published on official national governmental websites. The official counterpart(s) at country level are, depending on the country, from the national statistics office, the ministry of finance (or other central planning agency), or the ministry of agriculture. For some countries that do not directly report data to FAO, information is obtained either from the IMF GFS database; however, in this cases information is not disaggregated of the basis of COFOG 042; or from official national governmental websites. Data on GDP is extracted from the UNSD global database. Data on agriculture value-added and GDP are retrieved from the system of national accounts.

An AOI greater than 1 reflects a higher orientation towards the agriculture sector, which receives a higher share of government spending relative to its contribution to economic value-added. An AOI less than 1 reflects a lower orientation to agriculture, while an AOI equal to 1 reflects neutrality in a government's orientation to the agriculture sector.

Government spending in agriculture includes spending on sector policies and programs; soil improvement and soil degradation control; irrigation and reservoirs for agricultural use; animal health management, livestock research and training in animal husbandry; marine/freshwater biological research; afforestation and other forestry projects; etc.

Spending in these agricultural activities helps to increase sector efficiency, productivity and income growth by increasing physical or human capital and /or reducing inter-temporal budget constraints.

Out of 22 Arab Countries, 14 countries collect and disseminate their data on UNSD SDG Global database, namely: Algeria, Bahrain, Egypt, Jordan, Kuwait, Lebanon, Morocco, Oman, Qatar, State of Palestine, Sudan, Syrian Arab Republic, Tunisia, UAE. However, many of those countries are not reporting annually on this data. As illustrated in the table below, during 2015 -2020 FAO received GEA completed questionnaires from four countries only (Egypt, Jordan, Lebanon, and UAE). Data were also obtained from IMF GFS questionnaire for two other countries (Kuwait and Somalia). In addition, FAO calculated the index from MOF for Oman and Tunisia. Out of those 14 countries, only three: Bahrain, Egypt and State of Palestine, have disseminated national data almost equal to country data in their VNRs and in their SDG dashboards and reports.

Indicators	UNSD SDG database (C-CA)	UNSD SDG database (E-M-N-NA-G)	SDG in national report
2.a.1 The agriculture orientation index for government expenditure	14 (C): Algeria, Bahrain, Egypt, Jordan, Kuwait, Lebanon, Morocco, Oman, Qatar, State of Palestine, Sudan, Syrian Arab Republic, Tunisia, UAE	0	C ≈ Bahrain, Egypt, State of Palestine

C: country data, CA: country adjusted data, E: estimated data, G: global monitoring data, M: modeled data, N: non-relevant data, NA: data nature not available, NA: data nature not available as presented in UNSD SDG database, ≈: National data is almost equal to Country data

Country	2015-2020	FAO source
Algeria	No data	
Bahrain	No data	
Egypt	Data available	GEA questionnaire
Iraq	No data	
Jordan	Data available	GEA questionnaire
Kuwait	Data available	IMF GFS database
Lebanon	Data available	GEA questionnaire
Libya	No data	
Mauritania	No data	
Morocco	No data	
Oman	Data available	FAO Derived from MOF
State of Palestine		
Qatar	No data	
Saudi Arabia	No data	
Somalia	Data available	IMF GFS database
Sudan	No data	
Syrian Arab Republic	No data	
Tunisia	No data	FAO Derived from MoF
United Arab Emirates	Data available	GEA questionnaire
Yemen	No data	

Countries experience:

In Egypt, the Ministry of Finance sends the national statistics office the classifications and the questionnaire to be filled out, and the NSOs collects data from the relevant ministries and from the Ministry of Finance to fill both questionnaires and do the calculation.

In Bahrain, usually, the FAO questionnaire is sent to the liaison officer, and the officer in turn sends the questionnaire to the concerned authorities in the Ministry of Works, Municipalities Affairs and Urban Planning in the two agencies, the Agency for Municipalities Affairs and Marine Resources and the Livestock Agency to fill out the questionnaire, each according to his specialization.

In Lebanon, the focal point from the Ministry of Finance receives the GFS and GEA and compile data from different ministries to fill out both questionnaires. One of the main challenges faced is the lack of communication between the ministries and agencies and in the ministry itself.

Recommendations for Countries:

- Countries are requested to report on FAO questionnaire on regular basis annually.
- Countries are to disseminate country data as per UNSD SDG database in their national SDG reporting platforms and SDG reports and VNRs.
- Countries to enhance coordination with other stakeholders in the government to enhance collecting, dissemination and reporting of data at the national level.
- NSOs to coordinate at the national level to nominate to FAO the National Correspondent if not available yet.

Recommendations for ESCWA/FAO:

- ESCWA will coordinate with FAO and NSOs the establishment of focal points network in the Arab region
- FAO and ESCWA to provide training on the questionnaire for the focal points or to schedule this training in November with the Arab Monetary fund.

2.c.1 Indicator of Food Price Anomalies (IFPA)

This indicator measures food price volatility and detects abnormal growth of prices in food markets. It is an indirect indicator of Target 2.c, which aims to adopt measures to ensure the proper functioning of food markets and facilitate timely access to market information. The indicator measures the normalized differences of compound growth rates of prices from their historic mean. The IFPA uses a weighted sum of quarterly and annual compound growth rates (CGR). By using both CGRs, the indicator captures price variations (seasonality and shocks) within the year and across years. The IFPA is an indicator of abnormal (and undesirable) market behavior, and as such can be used to inform if, and when, policies that limit extreme price volatility may be required.

The IFPA can be calculated using Food CPI and/or commodity prices. The main sources of data for this indicator are national market information systems for the commodity prices and NSOs and IMF for the CPI. To be calculated, this indicator requires a time series of at least 5-year of monthly data. The calculation of this indicator should be preceded by deflating the effects of inflation from the nominal prices (or Food CPI) and generating real prices (or deflated food CPI). It includes 5 steps:

1- Calculate of the compound quarterly and annual growths rates (geometric mean- growth at a steady rate compounded over a specific period of time)
2- Build the linear time weight, in such a way that the more recent past will have a greater weight
3- Calculate of the weighted average and the weighted standard deviation
4- Calculate and compile quarterly and annual IFPAs
5- Build IFPA.

IFPA is defined at three levels:

- Normal price growth if: $-0.5 \leq IFPAy < 0.5$
- Moderately high price growth if: $0.5 \leq IFPAy < 1$
- High price growth if: $IFPAy \geq 1$

The step-by-step calculation process was demonstrated by entering price data on the Excel tool, which was distributed to the participants via ESCWA. In case NSOs do not have monthly price or general/food CPI data, they can access to the GIEWS FPMA Tool (containing price series of 86 countries, as of May 2021) and FAOSTAT, respectively. The access to these webpages is also demonstrated during the workshop. The FPMA tool allows national and international stakeholders to easily monitor and analyze price information for a wide range of commodities in markets of their choice with monthly frequency.

None of the Arab countries have disseminated any country data in the UNSD SDG Database. However, the State of Palestine and Oman have reported on their national data. Palestine used the Global data in its reporting.

Indicators	UNSD SDG database (C-CA)	UNSD SDG database (E-M-N-NA-G)	SDG in national report
2.c.1 Indicator of food price anomalies	0	1 (E) 20 (G)	G ≠ Oman G = State of Palestine

C: country data, CA: country adjusted data, E: estimated data, G: global monitoring data, M: modeled data, N: non-relevant data, NA: data nature not available, NA: data nature not available as presented in UNSD SDG database, =: National data is equal to Global data, ≠: National data is not equal to Global data

Recommendations for Countries:

- NSOs in cooperation with the national SDG focal points are to confirm FAO National Correspondents and establish reporting channels and enhance collaboration to complete annual reporting to FAO.
- NSOs are encouraged to disseminate their country data as per UNSD SDG database in their national SDG reporting platforms and SDG reports and VNRs.

Recommendations for ESCWA/FAO:

- ESCWA will coordinate with FAO and NSOs to finalize the list FAO National Correspondents in the Arab region
- FAO to share the demonstrated Excel Tool to ESCWA after the workshop and provide capacity building to National Correspondents in the Arab region, upon request, to facilitate the calculation of the 2.c.1 indicator.

6.4.1 Change in water-use efficiency over time

This indicator provides information on the efficiency of the economic and social usage of water resources. It addresses specifically the target component "substantially increase water-use efficiency across all sectors", by measuring the output per unit of water from productive uses of water as well as losses in municipal water use. Water use efficiency (WUE) is defined as the value added divided by the volume of water used for a particular major sector classified according to ISIC 4[6]. It is computed as the sum of the three major sectors agriculture, industry and services, weighted according to the proportion of water used by each sector over the total use. Together, the three sectorial efficiencies provide a measure of the overall water use efficiency in a country. The indicator provides incentives to improve WUE through all sectors, highlighting those sectors where water use efficiency is lagging behind.

An interesting feature of this indicator is that it adds a time dimension to the measurements, thus tracking the change in water use efficiency over time. Hence, by calculating the change in this indicator over time (CWUE), the change in countries' water use efficiency becomes visible, providing a complete picture of their situation. The indicator covers all the economic sectors according to the ISIC 4th revision, providing

[6] ISIC 4 sectors are: a) Agriculture; Forestry; Fishing (ISIC A), referred to as "agriculture"; b) Mining and quarrying; Manufacturing; Supply of electricity, gas, steam and air conditioning supply; Construction (ISIC b, c, d, f),referred to as "MIMEC" or "industry"; c) All service sectors referred to as "services";

the means for more detailed analysis of the water use efficiency for national planning and decision-making as it is directly affected by any "real" improvements or deterioration of a country's socio-economic infrastructure. A key message is derived when there is an increase in the value of the indicator over the years, indicating that economic growth is in the process of decoupling or fully decoupled from water use in a given country. Moreover, it would be useful to have a closer look at the numerator and denominator, as an increase in WUE does not necessarily indicate a decline in total water use or a reduction of the impact of water use. It would also be useful to combine it with the water stress indicator 6.4.2 to provide adequate follow-up of the target 6.4 on the efficient and sustainable management of water resources.

The interpretation of the indicator would be enhanced by the utilization of supplementary indicators to be used at country level.

Data on volumes of water used for the three sectors are collected at country level from national records and reported in questionnaires, in units of km^3/year or million m^3/year (see example in the AQUASTAT methodology page http://www.fao.org/aquastat/en/overview/methodology). The economic data needed for the indicator computation are in most countries compiled in the national accounts using the internationally agreed standards. The 'value added' for the three major economic sectors can be obtained from national statistical departments, other relevant national government agencies or international sources such as the World Bank, UNSD, and OECD databases.

The indicator is compiled through FAO AQUASTAT questionnaire sent to national correspondents to avoid inconsistencies and discrepancies. The questionnaire includes 34 variables out of which 12 are used for 6.4.1 and 6.4.2. Only 12 countries "'country'' data is reported in UNSD SDG database. However, time series have data gaps due to inconsistent reporting on an annual basis. Moreover, in many instances national reporting does not follow international standards as a result FAO implements estimation to fill data gaps.

It is also worth noting that only three Arab countries have disseminated national data in their official SDG reporting tool including VNRs and SDG dashboards. However, the national data for two out of the three countries namely Bahrain, Jordan and Oman are not equal to the country data disseminated on the UNSD global database.

Indicators	UNSD SDG database (C-CA)	UNSD SDG database (E-M-N-NA-G)	SDG in national report
6.4.1 Change in water-use efficiency over time	12 (C): Algeria, Bahrain, Egypt, Iraq, Jordan, Kuwait, Oman, Qatar, Saudi Arabia, State of Palestine, Tunisia, UAE	21 (E)	C ≠ Bahrain E ≠ Jordan, Oman

C: country data, CA: country adjusted data, E: estimated data, G: global monitoring data, M: modeled data, N: non-relevant data, NA: data nature not available, NA: data nature not available as presented in UNSD SDG database, ≠: National data is not equal to Country data and Estimated data

6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources

The purpose of this indicator is to show how much freshwater is being withdrawn by all economic activities, compared to the total renewable freshwater resources available in a given country. It tracks the level of pressure that human activities exert over natural freshwater resources, indicating the environmental sustainability of the use of water resources. In other terms, the indicator represents the environmental component of target 6.4.

A high level of water stress has negative effects on the sustainability of the natural resources and on the economic development of a country. A low level of water stress indicates a situation where the combined freshwater withdrawals by all sectors are marginal in relation to the available water resources in that country and has therefore little impact on the sustainability of water resources or on the potential competition between users. Extremely low values may indicate the inability of a country to use properly its water resources for its socioeconomic development. In such cases, a moderate and controlled increase in the value of the indicator can be a sign of positive development. It is worth noting that a country level indictor may not reveal the variations of water stress at the subnational level. Moreover, the indicator only partially addresses the issues related to sustainable water management and need to be combined with other water management indicators (e.g. indicator 6.4.1).

The indicator is computed based on three components: Total renewable freshwater resources (TRWR) Total freshwater withdrawal (TFWW) and Environmental flow requirements (EFR). It is computed as TFWW divided by the difference between TRWR and EFR, multiplied by 100. All variables are expressed in km^3/year (109 m^3/year). Although the indicator is based on total water volumes, sectoral data are needed to be able to disaggregate it in order to show the respective contribution of different sectors to the country's water stress, and therefore the relative importance of actions needed to contain water demand in the different sectors (agriculture, services and industry).

AQUASTAT, FAO's global information system in water and agriculture plays a key role in the data collection and the monitoring of the Sustainable Development Goal 6, and in particular indicators of target 6.4 on water stress and water use efficiency. The data collection methodology was changed in 2018 to adapt to principles of 2030 Agenda of country ownership. The indicator is compiled through FAO-AQUASTAT questionnaire sent to official nominated national correspondents every year to ensure the quality of the data. Each country has selected a ministry or agency or organization to coordinate data collection for the estimation of SDG 6.4. FAO then cooperates with the national correspondents at the country level. Each country must use the harmonized definitions, terms and guidelines provided by FAO and ISIC.

The questionnaire includes 34 variables out of which 12 are used for the estimation of 6.4.1 and 6.4.2. The response rate of ESCAW countries to the AQUASTAT questionnaire is 45 per cent. Common inconsistencies derive from the use of different units and terminologies. In the ESCWA region. The time series have many data gaps due to inconsistent annual reporting. As a result, FAO conducts data imputation to fill data gaps.

20 countries report on this indicator as per SDG Global database though officially nominated focal points. Seven countries do report on this indicator; however, the data are discrepant from the data provided by the national focal points.

Indicators	UNSD SDG database (C-CA)	UNSD SDG database (E-M-N-NA-G)	SDG in national report
6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources	20 (C): Algeria, Bahrain, Comoros, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Qatar, Saudi Arabia, Somalia, State of Palestine, Syrian Arab Republic, Tunisia, UAE	22 (E)	C ≠ Algeria, Jordan, Oman, Qatar E ≠ Kuwait

C: country data, CA: country adjusted data, E: estimated data, G: global monitoring data, M: modeled data, N: non-relevant data, NA: data nature not available, NA: data nature not available as presented in UNSD SDG database, ≠: National data is not equal to Country data and Estimated data

Palestine and UAE country experiences

The UAE National Statistics Office coordinates with the Ministry of Water and other stakeholders in completing FAO questionnaire. UAE still have an issue with applying FAO standard methodology especially on data related to quantities of water uses by sector and its application in economic census or industrial survey. To facilitate completion of accurate information on questionnaire, FAO is requested to provide training to countries on how to complete those questionnaires. Another challenge faced by UAE is water desalinated by some companies and sold cannot be monitored regularly.

Palestine NSO receives FAO AQUASTAT questionnaire, and completes it in collaboration with five main bodies: the Palestinian Water Authority, the Local Government Authority, the Environmental Quality Authority and the Ministry of Agriculture. Regarding computing water change use, a specialized survey is carried out from the economic census in consultation with the Environment Statistics Department on the ISIC classification and the environmental data. The final indicator is calculated based on the methodology set by FAO and disseminated in VNR and dashboard. However, the national data is different from the country data in UNSD and AQUASTAT databases.

Recommendations for Countries:

- NSOs to coordinate at the national level to nominate to FAO the National Correspondent if not available yet.
- NSOs to enhance coordination between all parties (NSOs, ministries and agencies) to harmonized and quality data
- Countries to try and seek FAO assistance/training in completing FAO questionnaire by October of each year to enhance data reporting
- NSOs, if in agreement with country data published on AQUASTAT Dashboard and UNSD SDG database to populate and disseminate on national reporting platforms and SDG and VNR reports

Recommendations for ESCWA/FAO:

- FAO to organize a workshop on indicators' concepts and methods, and on how to complete questionnaire with good practices form other countries.
- FAO to organize consultation meetings on data discrepancies between national and global sources
- ESCWA will coordinate with FAO and NSOs the establishment of focal points network in the Arab region

SDG 14

The conservation and sustainable use of the oceans, seas and marine resources for sustainable development is threatened by marine and by human land-use activities. SDG 14 aims to counter these threats, which include marine pollution and litter, sea water acidification, destructive fishing practices and overfishing, and harmful fishing subsidies. The main instruments to protect the oceans and the seas are to effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics (target 14.4) and to increase the economic benefits to small island developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism (target 14.7).

14.4.1 Proportion of fish stocks within biologically sustainable levels

Every two years, FAO publishes a report "FAO State of World Fisheries and Aquaculture**"** that highlights the critical importance of fisheries and aquaculture for the food, nutrition and employment. The fishery and aquaculture sectors provide more than 20% of the average per capita animal protein intake for 3 billion people and is especially critical for rural populations, which often have less diverse diets and higher rates of food insecurity.

This indicator measures the sustainability of the world's marine capture fisheries by their abundance. A fish stock of which abundance is at or greater than the level, that can produce the maximum sustainable yield (MSY) is classified as biologically sustainable. In contrast, when abundance falls below the MSY level, the stock is considered biologically unsustainable. The indicator measures progress towards SDG Target 14.4. There two main sources of primary data for the fish stock assessment are: the fishery dependent sources (collected from the fishery itself), and the fishery independent sources.

SDG 14.4.1 monitoring and determining indicator score require four steps at national level complemented by two additional two steps by FAO. The four steps are as follows:

- Step 1: Institutional set-up at the national level: Countries nominate a Principal National Correspondent from the NSO or alternatively from a line ministry (Ministry of Agriculture and/or Fisheries). Ideally, an alternate focal point I a leading scientist from each of the agency that is carrying stock assessment. Moreover, a technical working group is recommended to be created to facilitate the data collection process and to involve all stakeholders from government institutions, academia, fishing industries and NGOs. The main responsibilities of the National Correspondent are to lead the

process of consultation for indicator 14.4.1, to assemble and lead the technical working group, to prepare the final report using the questionnaire and to identify the capacity development and data gaps that require support from national, regional and international agencies.

- Step 2: Set-up of reference list of stocks: The reference list of stocks should be established by the national technical working group and should be a representative sample (at least 60%) of the current total national landed and/or reported catch. The list should be subject to minimal or if possible, no changes across time for a period of 5 years at least. This list must contain national and shared fish stocks of major importance in terms of catch, ecosystem, role, economic value, and social/cultural considerations. The straddling stocks are not included in this list.
- Step 3: Categorization of stocks' status and indicator calculation method: This step involves an evaluation of whether each stock can be considered "biologically sustainable", once done, the indicator can be calculated. The stock assessment method differs from a fish stock to another and from one country to another. Therefore, after setting-up the reference list, the assessor must determine the data available for each stock. Three main categories of data inputs are required: abundance, biology and catch.

  To determine if a stock is sustainable, the Maximum Sustainable Yield (MSY), the maximum catch that can be extracted from a fish stock over the long period, should be considered as the reference point for this indicator. FAO suggest the criteria of B_{MSY}<0.8 as indicative of an unsustainable stock status. The fish stock included in the reference list will be then categorized as biologically sustainable or likely to be biologically unsustainable or unknown. The latter will not be included in the country score. For the calculation of this indicator, each stock will be given the same weight. The calculation will be as follows: 14.4.1 score = sustainable stocks/stocks with known status.

  - Step 4: Reporting to FAO through the questionnaire:

  FAO requests countries to report on this indicator every 2 years through FAO SDG 14.4.1 questionnaire. The process of reporting requires strong ownership and leadership of the process at the national level, in other terms of involvement of research institutes, universities and fisheries authorities for data collection, and liaising with the fisheries authorities and national institutions responsible for this indicator which will help raise the awareness of data gaps to ensure better future monitoring and reporting.
- Step 5: Data quality assurance and feedback to the country by FAO: FAO produces a unique identifier for each stock listed in the national report. FAO also conducts quality assurance of national submissions, provides feedback to national focal points and seeks validation of results to review the indicator value. FAO produces regional and global estimates and disseminate those only, national data at stock level are not disseminated by FAO.
  - Step 6: Reporting to UNSD by FAO

FAO collected national data through SDG 14.4.1 questionnaire in 2020. Only seven countries out of the 22 Arab Countries responded to FAO questionnaire, but none made it yet to the UNSD SDG database.. FAO is currently conducting quality assurance in consultation with countries before submission to UNSD global database. Concurrently, FAO has been developing stock methods for data-limited situations and conducting capacity development to support countries on monitoring and reporting on SDG 14.4.1.

Countries can report calculate the national score according to SDG 14.4.1 methodology as explained in step 4.

Indicators	UNSD SDG database (C-CA)	UNSD SDG database (E-M-N-NA-G)	SDG in national report
14.4.1 Proportion of fish stocks within biologically sustainable levels	0	0	

C: country data, CA: country adjusted data, E: estimated data, G: global monitoring data, M: modeled data, N: non-relevant data, NA: data nature not available, NA: data nature not available as presented in UNSD SDG database

14.7.1 Sustainable fisheries as a percentage of GDP in small island developing states, least developed countries and all countries- - Aymen Charef

The indicator measures the value added of sustainable marine capture fisheries as a proportion of GDP. The methodology of data collection of this indicator is based on three main inputs:

- GDP extracted from National accounts (UNSD)
- Value added of fisheries and Aquaculture extracted from National accounts (UNSD),
- Sustainability of fish stocks extracted from country data related to indicator to SDG 14.4.1

Arab countries report to UNSD aggregated data for the value added of fisheries and aquaculture sector as part of the contribution of the Agriculture, forestry, fishing and hunting. These indicators are label as "country adjusted" to account for the value added for marine capture fisheries from the aggregate "fisheries and aquaculture". To do this, the quantity of marine capture fisheries as a proportion of total production is used as a proxy for the proportion of value added.

$$\text{Value added of marine capture Fisheries proxy (\%)} = \text{GDP from Fisheries and Aquaculture} \times \frac{\text{Quantity of Marine capture Fisheries}}{\text{Total Quantity of Fish}}$$

To determine which portion of the fisheries value added is sustainable, the value is then multiplied by the average sustainability of the FAO major fishing areas in which the country performs fishing activities (SDG indicator 14.4.1). The reason that the sustainability multiplier is based on FAO fishing areas is the same reason that there are no national values for 14.4.1: SDG 14.4.1 national data is not yet available for all countries. Finally, the value added of marine capture fisheries will be adjusted by the sustainability multiplier to get the sustainable marine capture fisheries as a percentage of GDP.

$$\text{Sustainable Fisheries as a \% of GDP} = \text{Sustainability multiplier} \times \text{Value Added marine Fisheries}$$

Data for eight Arab countries are disseminated on the UNSD SDG database, however only two countries Qatar and Morocco report on this indicator in their national SDG reports/dashboards. Morocco's data are discrepant from those disseminated by UNSD SDGG database.

Indicators	UNSD SDG database (C-CA)	UNSD SDG database (E-M-N-NA-G)	SDG in national report

14.7.1 Sustainable fisheries as a proportion of GDP in small island developing States, least developed countries and all countries	8 (CA): Bahrain, Comoros, Djibouti, Iraq, Kuwait, Morocco, Oman, Yemen	0	CA ≠ Morocco

C: country data, CA: country adjusted data, E: estimated data, G: global monitoring data, M: modeled data, N: non-relevant data, NA: data nature not available, NA: data nature not available as presented in UNSD SDG database, , ≠: National data is not equal to Country adjusted data

Recommendations for Countries:

- NSOs are encouraged to report to UNSD value added of fisheries and Aquaculture through the national accounts.
- NSOs are encouraged to disseminate their country data as per UNSD SDG global database in their national SDG reporting platforms and SDG reports and VNRs.

Recommendations for ESCWA/FAO:

- ESCWA will coordinate with FAO and NSOs to finalize the list FAO National Correspondents in the Arab region
- FAO to provide capacity building to National Correspondents in the Arab region to produce value added of fisheries and aquaculture, to report on SDG 14.4.1 and to increase data dissemination.

Forests and trees make vital contributions to both people and the planet, bolstering livelihoods, providing clean air and water, conserving biodiversity and responding to climate change. Due to their importance for the world and its population, forests and their sustainable management contribute to many of the SDGs, and in particular to Goal 15.

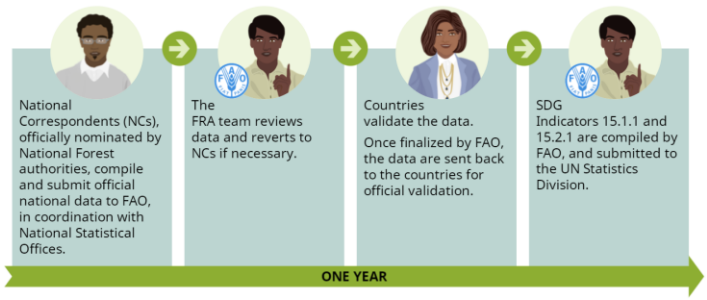
Data collection for reporting on the forest –related SDG indicators is conducted every five years through the Global Forest Resources Assessment (FRA) reporting platform7. This platform insure data harmonization, consistency, transparency and gives access to external data sources such as latest satellite images and other geospatial data. FAO requests countries to nominate National Correspondent by National Forest Authorities to compile and submit official national data for FAO in coordination with NSOs8. FAO trains the National Correspondents to compile country reports to give them insights on the agreed terms, definitions, and standardized reporting methodology. The FRA team reviews the data and reverts to the National Correspondent if needed. Once finalized by FAO, the data are sent back to the countries for official validation. The data for SDG indicators 15.1.1 and 15.2.1 are then compiled by FAO and submitted to UNSD.

While the full FRA data collection takes place only every five years as recommended by the FAO's Committee on Forestry, the SDG reporting process is annual. While the updates of the data have been so far limited to forest certification sub-indicator of 15.2.1 and replacing FAO expert estimates with country reported data if they have become available after the latest data collection cycle, FAO is currently working

7 Reporting is facilitated by an online platform. The platform also gives access to external data sources, latest satellite images and other geospatial data.

8 The National Correspondents network covers 187 countries and territories, which together contain 99.5 percent of the world's forests.

on a new reporting system that will allow countries to do voluntary updates of key indicators on annual basis.

Reporting Process 	Data collection and reporting through the FRA process reduces counties reporting burden and facilitate globally consistent reporting. **Provide data that can be compared at global level –** ensuring data harmonization **Clarify what is behind the data –** ensuring transparency of data **Increase coordination between data providers –** ensuring consistency of data

15.1.1 Forest area as a proportion of total land area

This indicator measures the proportion of land area covered by forest. To provide a precise definition of the indicator, it is crucial to provide a definition of forest. The latter is defined as "land spanning more than 0.5 hectares with trees higher than 5 meters and a canopy cover of more than 10 percent, or trees able to reach these thresholds in situ. It does not include land that is predominantly under agricultural or urban land use". SDG 15.1.1 is calculated as the forest area in the latest reporting year divided by the total land area and expressed as a percentage. It includes areas with young trees, abandoned shifting cultivation land with regeneration of trees, windbreaks, and rubber-wood and excludes urban trees, orchards, oil palm and agroforestry. Time series of this indicator show whether forests are being conserved or lost or have increased.

Indicators	UNSD SDG database (C-CA)	UNSD SDG database (E-M-N-NA-G)	SDG in national reports
15.1.1 Forest area as a proportion of total land area	15 (C)	7 (E)	C ≠ Sudan, Iraq, Lebanon, E ≠ Kuwait, Qatar E ≈ State of Palestine

C: country data, CA: country adjusted data, E: estimated data, G: global monitoring data, M: modeled data, N: non-relevant data, NA: data nature not available as presented in UNSD SDG database, ≈: National data nearly same as estimated data, ≠: National data is not equal to Country data or estimated data

FAO has received and disseminated data for 15 Arab countries on UNSD SDG database. However, three countries have reported on their national data. Comparison shows that country data for Sudan, Iraq and Lebanon were discrepant from national data.

When data are compiled by FAO and not validated by the country, all data from the time series are indicated as estimates, even if a country has previously reported to FAO. This is because the whole time series is being revised in each reporting cycle. For example, even though Palestine has reported on national data in 2000, UNSD disseminated data as "Estimated" to the Global database because data were not validated by the country.

15.2.1 Progress towards sustainable forest management

Indicator 15.2.1 measures progress towards Sustainable Forest Management (SFM) through five sub indicators:

1- Annual forest area change rate. It monitors the rate at which forest area changes over time.
2- Above-ground biomass stock in forest. It measures the amount of living above-ground biomass stored in the forest.
3- Proportion of forest area located within legally established protected areas. It monitors the extent to which forest is managed for the protection and maintenance of biodiversity and other natural and cultural resources.
4- Proportion of forest area under a long-term forest management plan. It measures the proportion of the forest estate for which a documented forest management plan, which is the basis for long term and sustainable management of the forest resources for a variety of management objectives, is present.
5- Forest area under an independently verified forest management certification scheme. It measures the area of forest for which forest management certificates have been issued by accredited independent bodies, in compliance with national and international standards.

The progress towards SFM is monitored through a dashboard of traffic lights, with green, yellow and red selected for each of the five sub indicators. or each sub-indicator, the value assigned to a country in the most recent reporting year is compared with the value assigned in the previous reporting year.

For sub-indicator 1, the progress is measured through 2 steps. As a first step, the forest area change direction is determined by examining the value of the forest area change. As for the second step, a comparison must be done with the value of the previous period. A green light is given when there is a stable or increasing forest area; a yellow light indicates that the forest loss rate is decreasing; a red light means that the loss rate is stable or increasing.

For the remaining 4 sub-indicators, the ratio (r) between the values of the current period and last period is calculated. When r>1, meaning an increase, a green light is given for the sub-indicator. If r=1, indicating a stable condition, a yellow light is assigned and if r<1, meaning a decrease, a red light is assigned. The data collected to track the progress for sub-indicators 2, 3 and 4 is extracted from FRA reports while for sub-indicator 5 data come directly from certifying bodies.

Indicators	UNSD SDG database (C-CA)	UNSD SDG database (E-M-N-NA-G)	SDG in national reports
15.2.1 Progress towards sustainable forest management	15 (C): Algeria, Comoros, Djibouti, Egypt, Iraq, Jordan, Lebanon, Mauritania, Morocco, Oman, Somalia, Sudan, Syrian Arab Republic, Tunisia, Yemen	7 (E)	C ≠ Sudan

C: country data, CA: country adjusted data, E: estimated data, G: global monitoring data, M: modeled data, N: non-relevant data, NA: data nature not available as presented in UNSD SDG database, = : National data same as Country data, ≈: National data nearly same as Country data, ≠: National data is not equal to Country data

There were 15 Arab countries reporting on this indicator as “Country” data on the NSD global database Out of those 15 countries, only Sudan had data in their SDG reporting tools but data were discrepant from country data on UNSD global database.

Algeria Experience:

In 2020, Algeria experts updated the FRA database, and it was a successful experience because it enables them to review and update data remotely and periodically. To calculate these indicators, Algeria experts use the recommended tool by FAO called “Collect Earth”. The countries are free to use whatever national definition they want to, but the SDG reporting uses the FAO forest definition. Therefore, FAO assists the countries in interpreting and implementing the FAO forest definition in their reporting through reclassification of national classes to FRA reporting classes.

Recommendations for Countries:

- NSOs in cooperation with the national SDG focal points are to confirm FRA National Correspondents and establish reporting channels and enhance collaboration to verify their reporting status and contact FAO in case there are needs for updates.
- NSOs are encouraged to disseminate their country data as per UNSD SDG database in their national SDG reporting platforms and SDG reports and VNRs.

Recommendations for ESCWA/FAO:

- ESCWA will coordinate with FAO and NSOs to finalize the list FRA National Correspondents in the Arab region
- FAO to provide capacity building to National Correspondents in the Arab region to increase data dissemination.

ATTENDANCE AND EVALUATION

The electronic evaluation results for the seven-days ESCWA/FAO SDG Series came as follow:

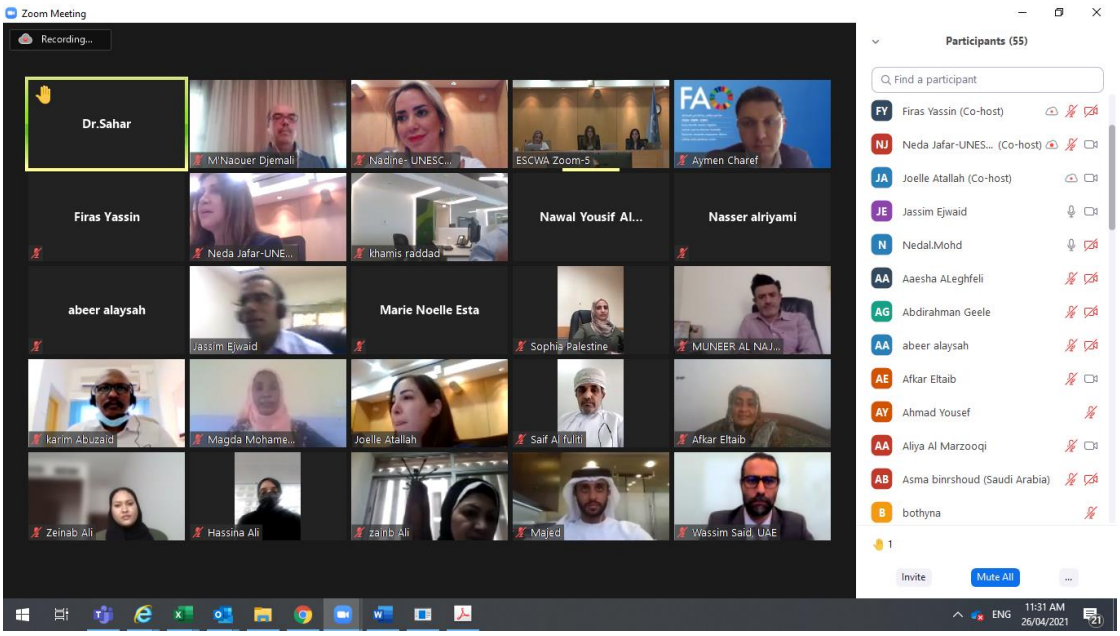
Indicator	Date	# of Submitted Evaluations	Excellent	Good	Fair	Excellent %	Good %	Fair %
Indicator 2.1.1, 2.1.2	**Monday 26 April**							
Q1 How do you rate the overall quality of this Webinar?		31	16	12	3	52%	39%	10%
Q2 How successful was the webinar in reaching its intended objectives?		31	15	13	3	48%	42%	10%
Q3 How would you evaluate the inputs provided by the presenters in reaching the intended outcome of the webinar?		31	14	12	5	45%	39%	16%
Q4 How would you evaluate the overall organization and logistics of the webinar?		31	19	8	4	61%	26%	13%
Indicator 2.4.1	**Tuesday 27 April**							
Q1		35	22	13	0	63%	37%	0%
Q2		35	16	19	0	46%	54%	0%
Q3		35	16	19	0	46%	54%	0%
Q4		35	21	14	0	60%	40%	0%
Indicator 6.4.1, 6.4.2	**Wednesday 28 April**							
Q1		36	24	12	0	67%	33%	0%
Q2		36	20	14	2	56%	39%	6%
Q3		36	17	17	2	47%	47%	6%
Q4		36	24	11	1	67%	31%	3%
Indicator 2.a.1	**Thursday 29 April**							
Q1		32	20	10	2	63%	31%	6%
Q2		32	20	11	1	63%	34%	3%
Q3		32	15	14	3	47%	44%	9%
Q4		32	18	13	1	56%	41%	3%
Indicator 14.4.1, 14.7.1, 2.5.1.a	**Tuesday 4 May**							
Q1		36	24	12	0	67%	33%	0%
Q2		36	23	13	0	64%	36%	0%

Q3		36	19	16	1	53%	44%	3%
Q4		36	24	11	1	67%	31%	3%
Indicator 15.1.1, 15.2.1	**Wednesday 5 May**							
Q1		36	22	13	1	61%	36%	3%
Q2		36	20	15	1	56%	42%	3%
Q3		36	19	16	1	53%	44%	3%
Q4		36	22	13	1	61%	36%	3%
Indicator 2.c.1, 2.5.1b, 2.5.2	**Thursday 6 May**							
Q1		31	20	9	2	65%	29%	6%
Q2		31	18	13	0	58%	42%	0%
Q3		31	16	14	1	52%	45%	3%
Q4		31	20	9	2	65%	29%	6%

TRAINING CERTIFICATION

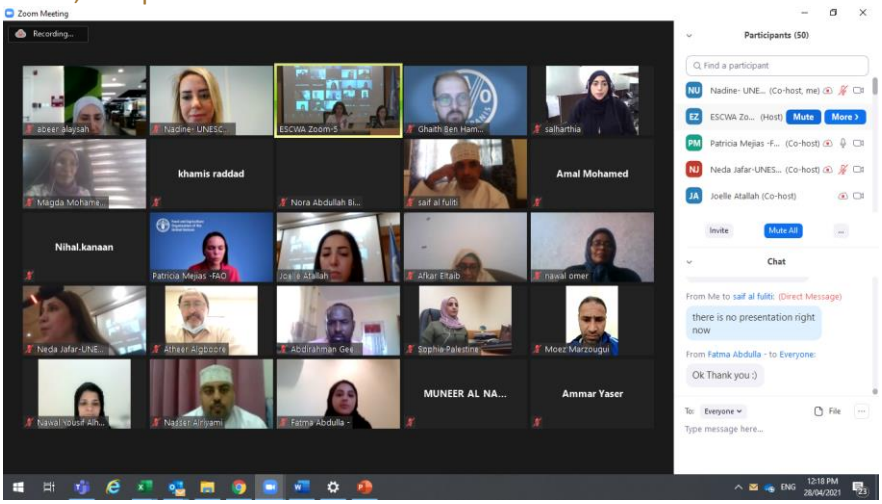
Participants who successfully attended the ESCWA SDG webinar were awarded a training certificate by the organizers.

GROUP PHOTOS
DAY 1, 26 April 2021

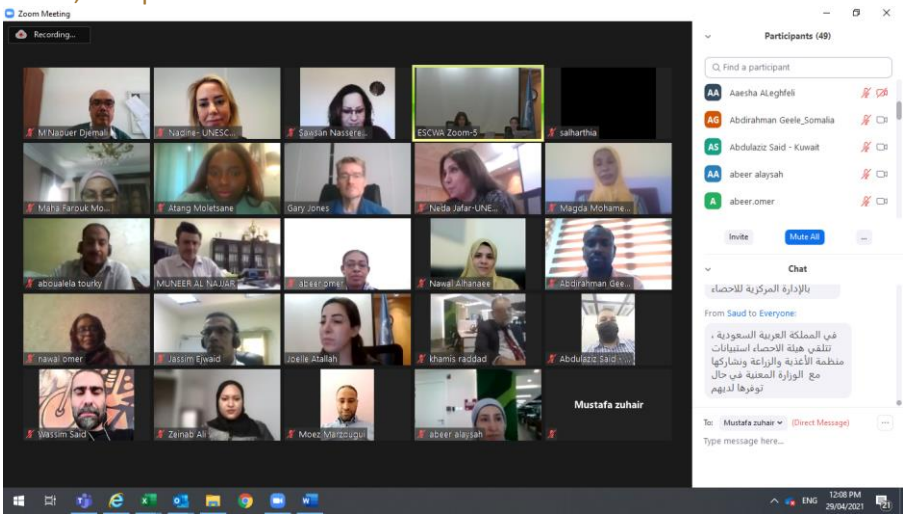


DAY 2, 27 April 2021

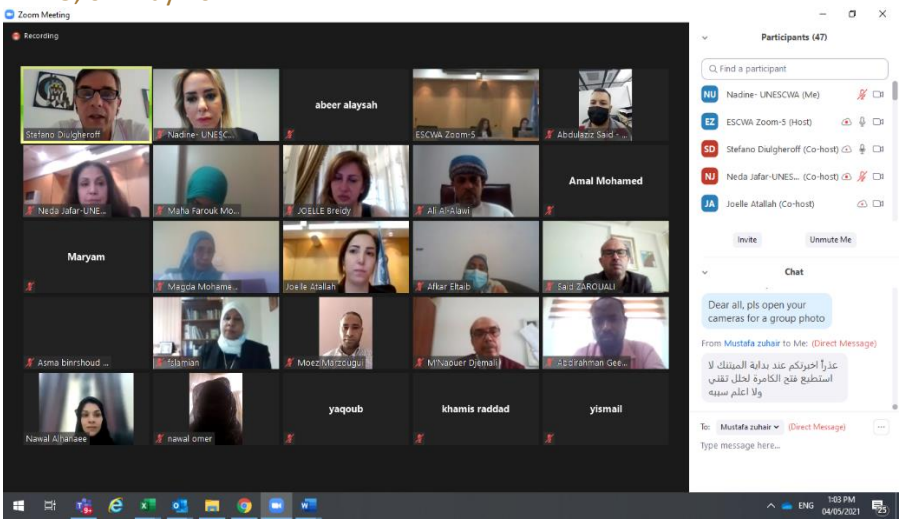
DAY 3, 28 April 2021



DAY 4, 29 April 2021

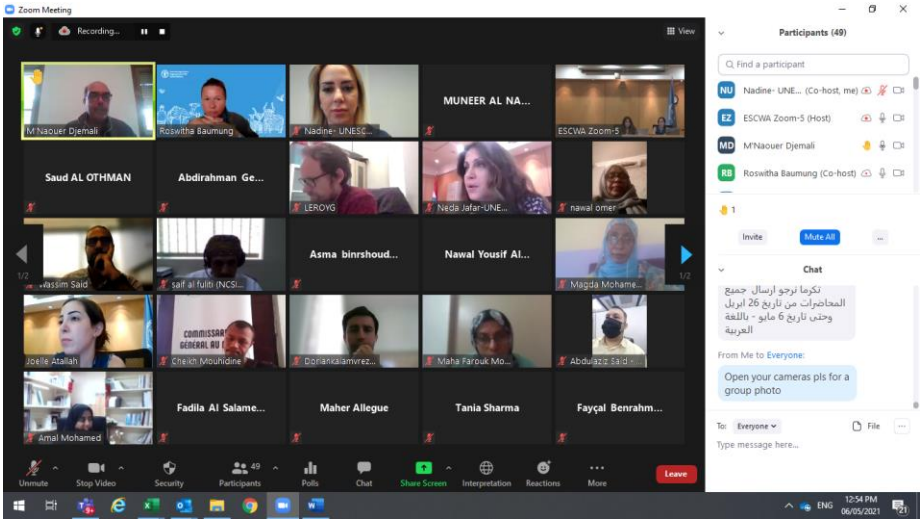


DAY 5, 04 May 2021



DAY 6, 05 May 2021

DAY 7, 06 May 2021



LIST OF ANNEXES

Annex 1: AGENDA

Day1: Monday 26 April		Speakers
10:00 – 10:10 A.M.	Introduction to the Webinar (objective, speakers, and content)	ESCWA – Neda Jafar
10:10 – 10:20 A.M.	The SDG monitoring framework - Roles of countries and FAO as custodian agency	FAO – Aymen Charef
10:20 – 11:20 A.M.	2.1.1 Prevalence of undernourishment	FAO - Firas Yassin
11:30 A.M. – 1:00 P.M.	2.1.2 Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES)	FAO - Firas Yassin
	Discussion – Q&A	
Day2: Tuesday 27 April		
10:00 A.M. – 2:00 P.M.	2.4.1 Proportion of agricultural area under productive and sustainable agriculture Interpretation needed	FAO - Arbab Khan
	Discussion – Q&A	
Day3: Wednesday 28 April		
10:00 – 11:15 A.M.	6.4.1 Change in water-use efficiency over time 6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources	FAO - Ghaieth Ben Hammouda
11:15 A.M. – 12:45 P.M.	AQUASTAT Interpretation needed	FAO - Patricia Mejias Moreno
	Palestine Experience UAE Experience Discussion – Q&A	Safia Ibrahim Khamis Raddad
Day4: Thursday 29 April		
10:00 – 12:15 P.M.	2.a.1 The agriculture orientation index for government expenditure Interpretation needed	FAO - Gary Jones FAO – Atang Moletsane
	Egypt Experience Bahrain Experience Lebanon Experience Discussion – Q&A	Maha Ismail Muneer Najjar Sawsan Nassereddine
Day5: Tuesday 4 May		
10:00 – 11:50 A.M.	14.4.1 Proportion of fish stocks within biologically sustainable levels 14.7.1 Sustainable fisheries as a proportion of GDP in small island developing States, least developed countries and all countries	FAO - Aymen Charef
	Discussion – Q&A	
12:00 – 1:30 P.M.	2.5.1.a Number of plant genetic resources for food and agriculture secured in either medium-or long-term conservation facilities Interpretation needed	FAO - Stefano Diulgheroff
	Lebanon Experience	Joelle Breidy

	Morocco Experience Discussion – Q&A	Said Zarouali
Day6: Wednesday 5 May		
10:00 – 11:20 A.M.	15.1.1 Forest area as a proportion of total land area Interpretation needed	FAO - Anssi Pekkarinen
11:30 A.M.– 12:25 P.M.	15.2.1 Progress towards sustainable forest management Interpretation needed	FAO - Anssi Pekkarinen
	Algeria Experience Discussion – Q&A	Wahid Tefiani
Day7: Thursday 6 May		
10:00 – 11:20 A.M.	2.c.1 Indicator of food price anomalies Interpretation needed	FAO - Jung Eun Sohn
	Discussion – Q&A	
11:30 A.M. – 12:50 P.M.	2.5.1b Number of animal genetic resources for food and agriculture secured in either medium-or long-term conservation facilities 2.5.2 Proportion of local breeds classified as being risk of extinction Interpretation needed	FAO - Roswitha Baumung FAO – Gregoire Leroy
	Tunisia Experience Discussion – Q&A	M'Nouer Djemali
12:50 – 1:45 P.M.	Way forward and conclusion	ESCWA – Neda Jafar FAO- Dorian Kalamvrezos Navarro

Annex 2: LIST OF ORGANIZERS & PARTICIPANTS

ESCWA	FAO
Neda Jafar Head, Statistical Policies and Coordination Unit Statistics, Information Society & Technology Cluster UN House, Beirut, Lebanon jafarn@un.org T. +961 1 978 344 Joelle Atallah Statistics assistant Statistics, Information Society & Technology Cluster UN House, Beirut, Lebanon Joelle.atallah@un.org T. +961 1 978 731	Dorian Kalamvrezos Navarro Programme Advisor DorianKalamvrezos.Navarro@fao.org T. +39 0657054500 Tania Sharma SDG Monitoring Intern Tania.Sharma@fao.org Firas Yassin Statistician Firas.Yassin@fao.org Arbab Khan Economist/Statistician Arbab.Khan@fao.org Ghaieth BenHamouda Indicators Management Consultant Ghaieth.BenHamouda@fao.org Aymen Charef Fishery Statistician Aymen.Charef@fao.org GarySteven Jones Government Finance Statistics Specialist Gary.Jones@fao.org Stefano Diulgheroff Information Management Officer Stefano.Diulgheroff@fao.org Roswitha Baumung Animal Production Officer Roswitha.Baumung@fao.org Anssi Pekkarinen Senior Forestry Officer Anssi.Pekkarinen@fao.org JungEun Sohn Economist JungEun.Sohn@fao.org Patricia Mejias Moreno AQUASTAT Coordinator patricia.mejiasmoreno@fao.org
List of participants (available in a separate excel sheet)	

Annex 3: RESOURCES

FAO SDG portal

FAO SDG Portal offers a snapshot of FAO's work on the 17 Sustainable Development Goals (background information, publications, events) (available in Arabic, Chinese, English, French, Russian and Spanish).

FAO SDG-Indicators portal

Sustainable development Goals Webpage for the 21 indicators under FAO custodianship and five indicators where FAO is a contributing agency (available in Arabic, Chinese, English, French, Russian and Spanish).

E-learning

A series of free multilingual e-learning courses to foster country adoption of best practices in data collection, analysis, and reporting of 21 SDG indicators.

Reports

- SDG progress digital report (2020) (PDF version available in all FAO languages and press release). Methodological Annex – Methods for assessing current status and trends and status and trend analysis per country and region.
- SDG progress digital report (2019) (PDF version available in all FAO languages and press release).
- Factsheets on the 21 SDG indicators under FAO custodianship: A highlight of the main indicators with the greatest gaps in country reporting (2020)
- Measuring the SDGs. Improving country data for monitoring SDG achievements and informing policy decisions (August 2019)
- FAO and the SDGs: Indicators - Measuring up to the 2030 Agenda for Sustainable Development (2017)

  - Statistical Capacity Assessment for the FAO SDG indicators: http://www.fao.org/sustainable-development-goals/indicators/statistical-capacity-cp-for-sdg-indicators/en/
  - FAOSTAT: http://www.fao.org/faostat/en/#data/RL

SDG 2.1.1 and SDG 2.1.2:

- Sustainable development goals, SDG 2.1.1: http://www.fao.org/sustainable-development-goals/indicators/211/en/
- SDG Indicator 2.1.1 – Prevalence of undernourishment (e-learning): https://elearning.fao.org/course/view.php?id=386
- Sustainable development goals, SDG 2.1.2: http://www.fao.org/sustainable-development-goals/indicators/212/en/
- SDG Indicator 2.1.2 – Using the Food Insecurity Experience Scale (FIES) (e-learning): https://elearning.fao.org/course/view.php?id=360&lang=en
- Applying the FIES: http://www.fao.org/in-action/voices-of-the-hungry/using-fies/en/

SDG 2.4.1:

- Sustainable development goals, SDG 2.4.1: http://www.fao.org/sustainable-development-goals/indicators/241/en/
- FAO / GSARS Survey Module SDG Indicator 2.4.1 (Eng): http://www.fao.org/3/ca7399en/ca7399en.pdf

- FAO / GSARS Survey Module SDG Indicator 2.4.1 (Ar): http://www.fao.org/3/ca7399ar/ca7399ar.pdf
- SDG Indicator 2.4.1 – Sustainable agriculture (e-learning): https://elearning.fao.org/course/view.php?id=503

SDG 2.5.1a:

- Sustainable development goals, SDG 2.5.1a: http://www.fao.org/sustainable-development-goals/indicators/251a/en/
- WIEWS Platform: http://www.fao.org/wiews
- SDG Indicators 2.5.1 and 2.5.2 – Plant and animal genetic resources: https://elearning.fao.org/course/view.php?id=392

SDG 2.5.1b and SDG 2.5.2:

- Sustainable development goals, SDG 2.5.1b: http://www.fao.org/sustainable-development-goals/indicators/251b/en/
- Sustainable development goals, SDG 2.5.2: http://www.fao.org/sustainable-development-goals/indicators/252/en/
- Cryoconservation of animal genetic resources: http://www.Fao.Org/docrep/016/i3017e/i3017e00.Htm
- In Vivo conservation of animal genetic resources: http://www.fao.org/3/i3327e/i3327e.pdf
- SDG Indicators 2.5.1 and 2.5.2 – Plant and animal genetic resources: https://elearning.fao.org/course/view.php?id=392
- Guidelines on surveying and monitoring of AnGR at: http://www.fao.org/docrep/014/ba0055e/ba0055e00.htm
- DAD-IS Platform: http://www.fao.org/dad-is/data/en/
- Animal genetics: http://www.fao.org/ag/AGAInfo/programmes/en/A5.html

SDG 2.a.1:

- SDG Indicator 2.a.1 – Agriculture orientation index: https://elearning.fao.org/course/view.php?id=361
- IMF Government Finance Statistics Manual 2014.: https://www.imf.org/external/Pubs/FT/GFS/Manual/2014/gfsfinal.pdf
- Eurostat – Manual on sources and methods for the compilation of COFOG statistics 2011.: http://ec.europa.eu/eurostat/documents/3859598/5917333/KS-RA-11-013-EN.PDF
- Sustainable development goals, SDG 2.a.1: http://www.fao.org/sustainable-development-goals/indicators/2a1/en/

SDG 2.c.1:

- Sustainable development goals, SDG 2.c.1: http://www.fao.org/sustainable-development-goals/indicators/2c1/en/
- FMPA: http://www.fao.org/giews/food-prices/home/en/
- Policy options to address price volatility and high prices: http://www.fao.org/3/i2330e/i2330e05.pdf
- GIEWS FMPA Tool: https://fpma.apps.fao.org/giews/food-prices/tool/public/#/home
- Consumer Price Indices (Food/General): http://www.fao.org/faostat/en/#data/CP
- SDG Indicator 2.c.1 – Food price anomalies (e-learning): https://elearning.fao.org/course/view.php?id=362

SDG 6.4.1 and SDG 6.4.2:

- Sustainable development goals, SDG 6.4.1: http://www.fao.org/sustainable-development-goals/indicators/641/en/
- WaPOR Platform: https://wapor.apps.fao.org/home/WAPOR_2/
- Sustainable development goals, SDG 6.4.2: http://www.fao.org/sustainable-development-goals/indicators/642/en/
- Incorporating environmental flows into water stress indicator 6.4.2: http://www.fao.org/3/CA3097EN/ca3097en.pdf
- Change in water use efficiency over-time (SDG indicator 6.4.1): http://www.fao.org/documents/card/en/c/ca5400en/
- Comment inclure les besoins environnementaux en eaux dans l'indicateur 6.4.2 du « stress hydrique » : http://www.fao.org/3/ca3097fr/CA3097FR.pdf
- خط الأساس العالمي لمؤشر هدف التنمية المستدامة 6-4-2: https://www.unwater.org/app/uploads/2018/12/SDG6_Indicator_Report_642_Progress-on-Level-of-Water-Stress_2018_ARABIC.pdf.pdf
- خط الأساس العالمي لمؤشر هدف التنمية المستدامة 6-4-1: https://www.unwater.org/app/uploads/2018/12/SDG6_Indicator_Report_641_Progress-on-Water-Use-Efficiency_2018_ARABIC.pdf.pdf
- Aquastat Dashboard: www.fao.org/aquastat/en/
- التقدم المحرز في الادارة المتكاملة للموارد المائية ٍ موجز واف: https://www.unwater.org/app/uploads/2019/02/ES-Guide-AR_Final-webPDF.pdf
- الهدف 6 من أهداف التنمية المستدامة التقرير التجميعي 2018 بشأن المياه والصرف الصحي: https://www.unwater.org/app/uploads/2018/07/executive_summary_SR2018_16pages_AR.pdf
- www.sdg6monitoring.org
- SDG Indicator 6.4.1 – Change in water use efficiency (e-learning): https://elearning.fao.org/course/view.php?id=475
- SDG Indicator 6.4.2 – Level of water stress (e-learning): https://elearning.fao.org/course/view.php?id=365

SDG 14.4.1:

- Sustainable development goals, SDG 14.4.1: http://www.fao.org/sustainable-development-goals/indicators/1441/en/
- ASFIS List of Species for Fishery Statistics Purposes: http://www.fao.org/fishery/collection/asfis/en
- Definition and classification of fishing gear categories: http://www.fao.org/3/t0367t/t0367t00.htm
- FAO fisheries and resources management system (FIRMS): http://apsoi.org/sites/default/files/documents/meetings/MoP6-Doc10%20Rev1%20SIOFA-FIRMS%20Partnership.pdf
- SDG indicator 14.4.1 – Fish stocks sustainability (e-learning): https://elearning.fao.org/course/view.php?id=502

SDG 14.7.1:

- Sustainable development goals, SDG 14.7.1: http://www.fao.org/sustainable-development-goals/indicators/1471/en/

SDG 15.1.1 and SDG 15.2.1:

- Global Forest Resources Assessments: http://www.fao.org/forest-resources-assessment/en/
- Insight into the global forest resources assessment process: https://www.youtube.com/watch?v=SmMyfNlZ-jQ
- Sustainable development goals, SDG 15.1.1: http://www.fao.org/sustainable-development-goals/indicators/1511/en/
- Sustainable development goals, SDG 15.2.1: http://www.fao.org/sustainable-development-goals/indicators/1521/en/
- Life on Land: http://www.fao.org/sdg-progress-report/en/#sdg-15
- SDG indicators 15.1.1 and 15.2.1: Forest area and sustainable forest management (e-learning): https://elearning.fao.org/course/view.php?id=446

Annex 4: Q & A

Country /Name	Questions	Answers
Indicator 2.1.1		
Sudan – Magda Elgaali	There are factors that influence nutritional requirements that are age and gender. Are other factors considered? As outliers?	Factors that affect the individual requirements are age, physiological status, gender, bodyweight, and lifestyle.
Bahrain – Muneer Najjar	Regarding surveys, should the Ministry of Health be involved, as it is the one who conducts these surveys? Do we take the food balance sheet as a source of data?	It is very important to include the ministry of health because to calculate the average food intake based on quantities of energy consumption, we need food composition tables to multiply it by the quantities of food commodity consumption. Regarding the second part of the question, it is not included in the calculation of the PoU for this exercise. But if the surveys such as HIES are not available, we can refer to the food balance sheet as the average available at the country level and derive the average dietary energy consumption form the average available.
Tunisia – M'Nouer Djemali	Why don't we use the mean and its standard deviation?	In the method of calculation, the coefficient of variation is one key parameter to be used in the calculation of PoU.
ESCWA	Why the data in the UNSD SDG database are estimated?	For the 13 countries that have data in the UNSD, we have used food balance sheets to calculate this indicator instead of HIES. But if any country has an objection regarding these numbers and wants to submit data based on HIES, FAO is ready to analyze this data and validate it.
Indicator 2.1.2		
Sudan - Karim Abou Zeid	To what extent the term "worried" reflect the accuracy of the situation knowing that the understanding of this term might change between the countries?	The fieldworkers must choose the right wording to be understandable by their community before applying these questions. This process called FIES language adaptation that ensures the 8 questions are well adapted culturally and linguistically to the context of data collection.
Iraq – Zeinab Ali	To which age group these questions are addressed?	Usually, at the individual level, these questions must be addressed to individuals aged 15 years and above or 18 (depending on the country). At the household level, these questions must be addressed to the head of the household.

Sudan - Karim Abou Zeid	Is there any difference in the sample size if these questions are addressed at the individual level or household level?	As much as the sample size is bigger, the data will be more reliable to limit the margin of error. Generally, we must have a minimum of 300 observations at each disaggregation level to produce a reliable estimate of the food insecurity levels. This recommended sample size is equally applied to both individual as the household FIES modules.
Sudan - Karim Abou Zeid	In Sudan, FIES is not regularly collected. But we collected data regularly on food consumption score. Can we merge both data for this SDG indicator?	Both agencies WFP and FAO do not have yet the approved method to converge the estimates based on these two indicators. Food consumption score and FIES are two indicators having two different methodologies. FIES is now in the process of being included in the IPC classification procedure
ESCWA	In which household survey these questions must be included? And what is the periodicity of these surveys?	For the global reporting, these questions must be included in a nationally representative household survey administered annually with reference period of 12 months. But in the case of emergency, such covid-pandemic it can be administered more frequently with a reference period of 30 days.
UAE – Abeer Alaysah	Do FAO calculate though the questionnaire sent via Gallup and based on the sample size or based on the FIES questions collected from countries?	FAO collect data through Gallup which helps get the data from all the countries at a cost-effective way. We do compare both data to produce this indicator. But most importantly is for countries to produce their own data based on FIES questions to replace the Gallup data by this data after validating it with FAO.
Indicator 2.4.1		
UAE – Khamis Raddad	Is the agriculture census enough to capture all the aspects for this indicator? Regarding the sample size, should we take the holding size or the farm size? And for the non-household do you mean commercial farm?	Non-household sector agriculture holding commonly refers to large scale commercial holdings which are either be owned by the government or by corporate or by group of individuals. For the definitions of the household/non-household agriculture holding, these are taken from to The World Census of Agriculture 2020. The sample size is defined as the subset of agriculture holdings the areas of which are representative of the country agriculture land area, country decide on the minimum sample size to be included ensuring adequate representation of the country agriculture land area. The data is compiled through FAO questionnaire module, that consists of a set of minimum questions,

		available online in English, French, Spanish and Arabic. Countries may include this module in their agriculture survey and refer to FAO guidelines on sampling
UAE - Wassim Said	My question relates to the inclusion and exclusion of the indicator around the controlled environment agriculture and other alternative food system production units that are not conventional and yet more or less follow the five principles of SFA and they have the 11 sub-indicators which we deem sustainable. Are those to be incorporated? If yes, how? If not, why not?	For the indicator 2.4.1, we have held virtual meetings with ADAFSA in 2020. There are few limitations for SDG 2.4.1. FAO was unable to cover everything related to agriculture as part of SDG 2.4.1. FAO had to draw a line somewhere. In terms of scope, all agriculture systems whether intensive or extensive, whether those take place in open field or in a controlled environment, everything which is carried out in a controlled environment will be considered as agriculture land area of the country and hence should be considered as part of the scope of indicator 2.4.1. For the denominator, it focuses on the crops and livestock since it is impractical to combine everything in one indicator and there are other SDGs that would cover those aspects.
UAE – Khamis Raddad	I believe this indicator needs to put a lot of effort, time and skills to be calculated due to the different inputs and outputs. Can't we calculate the profitability for each holding instead of each crop? Isn't it easy to start by calculating the profitability for each crop?	We totally acknowledge that countries if wishes can use the more sophisticated or simplified options, FAO build different options for countries that have different levels of developed agriculture statistical systems. FAO do not force countries to adopt the more data demanding and sophisticated option which will result in more resources required to be able to collect this information. Therefore, the recommended solution is to add a simple question in the agriculture survey, to ask the farmer directly as to whether his agriculture holding was profitable in the last 3 years.
UAE - Fatma Abdulla	What profitability refers to exactly??	It means the total output value produced by the agricultural holding at a given period minus the total cost of production.

ESCWA	What is the minimum area to be considered in hectare in these questions?	It depends on the country as to what size of agriculture holding is important to be included. FAO do not put a threshold that should be selected as a part of the sample in the country. However, FAO has prepared a document on the sampling available online.
UAE – Aliya Al Marzooqi	For areas that do not have soil and use new techniques to do the farming such as hydroponic systems, how do we measure the soil?	If a given agriculture holding is engaged in activities such as hydroponic systems, vertical systems and is selected as a part of a sample, it may be considered as green fit is not contributing to the problem of deteriorating the environment and it is not adding to the concerns related to agriculture sustainability of the country.
UAE – Abeer Alaysah	For the new techniques of farming, what is the methodology used to calculate the area and the productivity per area?	Even in classical traditional agriculture, estimating measuring and monitoring sustainability was never done before. It was talked about in the past but there was no statistical framework on how to go about it. Even SDG 2.4.1 being an indicator to measure progress in terms of sustainability in so called traditional agriculture, it is a very big quantum leap in terms of providing a framework which is tested in countries and can eventually use. There are few limitations of SDG 2.4.1. For measuring the sustainability is commonly managed lands, a new indicator is needed.
Oman – Saif Al Fulaiti	Regarding the survey of indicator 2.4.1, can it be done through mobile data collection?	Yes, it is possible. But the only problem with the mobile phone and tablets would be, before even the question is displayed on the screen, a proper explanation of some terms is needed so the respondent would be able to answer correctly.
UAE – Abeer Alaysah	For the organic farms, there are rules in for fertilizer usage. Once the farm has a certificate that it has an organic farming system, is it by default to match all of this or we need to make this assessment for this system?	Certification of any kind which is awarded based on practicing organic agriculture or any other form of agriculture considered to be environment friendly, from this point of view FAO did consider first while developing the methodology, to have the questions on organic certification as a filter question., Meaning if the country is using a certification for organic agriculture, the relevant questions will be highlighted directly as green or skipped if related to fertilizers, pesticides and biodiversity. When this version was deliberated to countries, it has been said that organic agriculture is a very tiny proportion of the entire agriculture area and as well in term of value of output produced. Moreover, not all the organic agriculture is environment friendly. Therefore, the questions related to the usage of fertilizers, pesticides cannot be skipped in some

		cases. Thirdly, the certification of organic agriculture does not have a worldwide definition, but it relates to the context of each country. So, the questions related to fertilizers won't be skipped for any organic agriculture. If countries find that it is redundant to ask the organic agriculture farms the questions related to fertilizers usage, countries may skip these questions.
Tunisia- Said Zarouali	Can FIES questions be used for answering the indicator 2.1.2 for the sub-indicator 10?	This sub-indicator is customized for sustainable agriculture. FIES indicator on its own covers the entire population not only the agriculture household. From this point of view, the FIES estimates will only cover all group of people and which may not have a nationally representative sample size of agriculture holdings needed for SDG 2.4.1. So FIES used to collect data for indicator 2.1.2 cannot be used for indicator 2.4.1. But in some cases, if the agriculture population is well represented in the sample, these questions can be used. However, it is better to add the questions related to 2.4.1. in the agriculture survey.
Kuwait - Abdulaziz Said	How to calculate the percentage of agricultural area devoted to productive and sustainable agriculture?	It is very simple and straight forward. It can be easily done based on the dashboard. The aggregate of 2.4.1 is the value of the sub-indicator that has reported the highest value of red or unsustainability.
Indicators 2.5.1b – 2.5.2		
Bahrain – Muneer Najjar	As a country, we do not have a gene bank to keep the genetic resources of animals. We only keep some species alive in the farms and scientific research center. Is it enough?	There are limitations in maintaining the breeds, with regards to having cryoconserved materials. The more frequent way of maintaining breeds is in situ by farmers for breeds that are economically interesting for them. This indicator helps monitoring these situations to see if other actions need to be implemented such as cryoconservation. Therefore, this indicator is more of tool to help making decisions. If there is no gene bank in the country and the country does not have an agreement with other country to use their gene bank, the indicator will be given the value 0. The country must select the most important breeds economically and socially for them to keep.
ESCWA	What is the minimum number of breeds the countries must report on? And what if the	The country must report on all the breeds kept in the country. If we focus on the SDG indicator, then the country must report only on the local breeds if they have a distinct breed. Most countries report on their local breeds which means it is very rare that a country does not have a local breed but transboundary breeds. The definition of breed depends on the country.

	countries do not have a distinct breed?	For example, a country can group all the species in one local breed and another country can divide them into sub-breeds. It is important to know that breed is not a genetic concept but also a social-cultural concept.
Tunisia – M'Nouer Djemali	Why do we have two indicators related to cryoconservation and to the risk status while we know the sustainable use is very important when we talk about animal genetic resources maybe missing this component we are not capturing what is going on on the filed for animal genetic resources?	You are completely right; this indicator does not cover the complete target as it is formulated. But the SDG indicators are developed, we needed to restrict the number of indicators. There is been a clear line to limit the number of SDG indicators. But this does not mean other indicators do not figure but for the global monitoring of SDG we need a limited number of indicators. This element of use of local breed is included in one of the sub-indicators of one of the SDG indicators 2.4.1. It comprises 11 sub-indicators covering multiple dimensions of sustainable and productive agriculture, one of which related to biodiversity and within that sub-indicator, one of the criteria that certify that a farm is more sustainable, is the use of a minimum threshold of local breeds.
ESCWA	What is the experience of the countries for the indicator 2.5.2? What is the source of data for this indicator? Do FAO validate the data collected? Is the system for both indicators?	The data we collect is from DAD-IS platform where countries fill in the data. No FAO do not validate the data collected. We only go back to national coordinators if we see extreme changes between one year to another. The system is for both indicators.
Indicator 2.a.1		
ESCWA	What is the source of data?	The Ministries of Finance report on the GFS of IMF. Generally, the countries report on the government expenditure on agriculture through the questionnaire sent to FAO by the ministries of finance or the ministries of agriculture or NSOs. Ideally, the ministry of finance should take the lead. FAO send the questionnaire to the list of national focal points for the GFS of the IMF and their list as well (ministries of finance, NSOs and ministries of agriculture).
ESCWA	How can we combine FAO and IMF two questionnaires into one?	The statistics department of the IMF have not been opened to do that so far. The chief statistician of the FAO has proposed this method to the head of statistics at the fund. But it was not well received. Maybe another conversation can be held on the 2025 update revision of the system of national account.

ESCWA	What is the periodicity of the questionnaire sent by FAO?	The questionnaire is sent on an annual basis in May and data are released in November of each year.
ESCWA	Regarding Tunisia, who provides the data for FAO and IMF? Are they NSOs?	Since 2012, the reporting of fiscal year 2012 data, Tunisia have not reported GFS to the IMF and Tunisia has not yet the GEA to the FAO. Because of that non reporting or gap in data, I did this investigation and put these data together.
Sudan – Magda Elgaali	A case of less than 1 may not mean that there is external support. It may imply that the spending is personal.In the sense that farmers, for example, spend on agriculture without government or external support. Therefore, government spending was less than 1	Yes, I agree with that. The farmers are investing on themselves and they don't rely on others.
Indicator 2.c.1		
Tunisia – M'Nouer Djemali	What does it mean net food importer – would it be misleading to use this indicator?	A net food importer is a country whose value of imported goods and services is higher than its exported goods and services over a given period. For example, Sudan is a net wheat importer. This indicator doesn't look at net imports and net exports. It looks at the increasing prices. It calculates how much the price has increased for this month for example and for the same month of last year. By comparing this month price increase with the same month of the last year we can calculate the IFPA.
Anas Fattah	How to deal if there is a shortage of data in some years?	This is where the weakness of this indicator lies. For the food CPI and general CPI, countries won't have missing points. In terms of food prices where there could be more missing values, by using the excel tool, it will calculate by assuming the average between the price entries. But if many prices are missing, we suggest dropping the calculation of IFPA for these prices.
Tunisia – M'Nouer Djemali	How accurate are the computed indicators? Is there a precision or accuracy information linked to them?	The indicator employs the values that already exist for food prices. The data is accurate but there is some weakness since we are deflating food CPI by general CPI.

Said Zarouali / Eltaf Ahmad	Do we calculate the indicator for each type of food? Are there selected food items or all components of the food basket?	IFPA can be calculated on any type of food using their prices, but it depends on the country and the importance of the food produced and food consumed. Countries can choose any type of food or agriculture products.
Said Zarouali	We have daily prices in the wholesale markets five days a week. How do we deal with it?	Using the daily or weekly prices, we can make a simple average to obtain the monthly prices. It doesn't matter if the prices are retail or wholesale prices.
Sudan – Magda Elgaali	When calculating the IFPA annual, how are the months of high changes dealt with compared to other months of the same year? Regardless of the reason	IFPA annual is calculated by setting the reference between year and year, in other terms by setting the growth rate within this year. It is designed to not to be affected by high changes within the year. But in the general IFPA we have annual IFPA and quarterly IFPA. So that's why we can see the IFPA changes from year to another and within a quarter year.
Said Zarouali	We have important changes in the prices of foodstuffs during the month of Ramadan, which greatly affects the rate of prices. How do you deal with the situation?	Any fluctuation whether seasonal or occasional should be captured in the quarterly but overall, this comparison happens on a yearly basis. This is what the IFPA is meant for to capture the yearly basis fluctuations.
ESCWA	The indicator in the UNSD database is labelled as global. How do you collect the data and why is it labelled as global?	The inflation rate is generated by countries. The data is labelled as global because the world coverage of fruits in general CPI that all the countries have. Normally countries should have a portal where they publish food prices either by a line ministry of the NSOs and we gather the information from these portals to generate the monthly prices. We also gather data on exchange rate and inflation rate to enable comparison of the prices. But in some cases, countries do not have a portal, so we receive the data by email. Data is also collected through a questionnaire sent by the statistics division at the FAO. FAO recalibrate the data to put the same baseline year for all the countries, for this reason the data might differ from the national data.

Indicators 6.4.1 and 6.4.2		
Sudan – Magda Elgaali	Is there a difference between water stress and misuse of water, or is the meaning the same?	Water stress is a potential consequence of water misuse. In other terms, water misuse may lead to water stress
ESCWA	How data is collected and how the process of consultation is happening?	The process does not start at the first stage from FAO but from the countries. Each country must select a ministry or agency or organization from the private sector to prepare the methodology and collect the data. At this stage, FAO can cooperate with the Focal Points at the country level and help building the methodology of collection. Each country must use the definitions, terms and guidelines provided by FAO and ISIC. If the countries are incapable of collecting data or some data are missing, the data can be estimated using the remote sensing and satellites. If the data cannot be collected at all or estimated, countries can rely on international datasets of World Bank and UNSD.
ESCWA	What is the difference between country data and estimated data on UNSD database?	Some countries do not disseminate data on a yearly basis. Therefore, FAO use the same old data from previous years and do some estimation on it to publish it on the UNSD global database for the years where data is not provided.
Tunisia – M'Nouer Djemali	The problems countries are facing are related to the fact that data defers between ministries and even between departments at the same ministry and the missing coordination at the regional and national level. Moreover, countries do not find it useful to collect the data for these indicators. Why the solution can't be a national committee including all relevant parties that will back up the national focal point?	It is unfortunate that some country may think that these indicators are useless. In fact, they were all chosen following an in-depth discussion among all UN Members. In fact, FAO is collaborating with a number of countries, including Tunisia, in order to improve the methodology for the disaggregation of indicator 6.4.2, so to make it more useful for considerations at the level of river basin within the country. However, this implies more, not less effort for the production of the disaggregated data. To this end, establishing a national committee is needed and advisable.

State of Palestine – Safia Ibrahim	Is the process done by Palestine NSO to collect data correct?	What the AQUASTAT experts propose is to have a national correspondent and an alternate national correspondent coming from different institutions which allows better coordination. Therefore, AQUASTAT do not select the national correspondents but the countries must do.
UAE – Abeer Alsayah	As GCC countries, we have issues on how to calculate the desalinated water and how to disaggregate the data. On the other hand, we have found difficulties for the indicator 6.4.2 on how to distinguish between the natural water and the desalinated water. My other question is regarding the other survey used to collect the data; do you have any other methods used to collect the data?	For the calculation of indicator 6.4.2, the data required are for the freshwater resources. We need statistically to discount non-conventional water resources such as desalinated water. FAO is now working with countries to improve the use of non-conventional water. Having this information dissociated from the freshwater resources is important to understand what the strategies countries are using to face water scarcity. However, in the SDG system it is allowed that a country define a given global indicator as "not relevant". This can be the case for 6.4.2 in some hyper-arid countries. Regarding your second part of the question, data is only collected via AQUASTAT Platform by answering the questionnaire.
UAE – Abeer Alsayah	How the countries could improve their information systems to provide the data?	Our aim now with the new AQUASTAT Dashboard is to exchange with countries the different methodologies on how to collect data. Therefore, in the near future, we will be organizing a workshop on the best practices
UAE – Abeer Alsayah	For the GDP used in the questionnaire, do we use the GDP PPP or the current GDP? And what is the source of this GDP?	The countries can use the GVA and adjust it to the recommended base year 2015 using the deflator. Then, to convert the real GVA in local currency unit (LCU) into USD equivalent, it is recommended to use the market exchange rate (MER). If not available, the United Nations operational rates of exchange should be used instead. GVA data can also be retrieved from international sources such as the World Bank, UNSD and OECD.
ESCWA	How the consultation process is done before publishing the data?	When the AQUASTAT receive the questionnaire, if the data is complete, it will be directly published. However, if there are any gaps, the team will proceed with a consultation meeting with the correspondent country to validate the data. If some data is missing and can be provided from the UNSD database and FAOSTAT, AQUASTAT extract the data directly from these databases in order not to burden the countries. Once this

		data is provided again from the countries, AQUASTAT team will change the ones extracted from the abovementioned databases by the ones provided.
Indicator 14.4.1		
Sudan – Magda Elgaali	The methodology for the indicator is chosen by the country, while the reference point is determined by the FAO. How can the two be reconciled?	Each stock has its own characteristics. The methodology for valuing inventory is chosen directly from the availability of data. All data lead to a certain methodology. But the reference is the MSY that must be adopted by all countries. This reference helps determine whether the stock is sustainable or not.
Sudan – Magda Elgaali	Is the sustainability of the stockpile for a period of five years, for example, as you mentioned or is there certain limits because the stock changes from one year to the next?	The inclusion of the procurers in the checklist is done every 5 years, while the determination of the procurers takes place every year or two according to the resources and capabilities.
ESCWA	What was the institutional structure of the countries that provided the data like? Are the NSOs included in the process of data collection?	In some countries, the national statistics office is the main point of contact, and each ministry works on some indicators in coordination with the statistical center. However, in some countries, this coordination does not exist for this indicator because it is based on scientific research. Therefore, in some countries, the Scientific Research Center of the Ministry of Agriculture is the main point of contact in the regional bodies for scientific research and stock control. In this case, the questionnaire arrives to the center and returns it to the FAO because the research center is the center at which data are collected at the national level. The Scientific Research Center, in reviewing with some universities, decides on the reference list. In some countries there are public universities that research and follow up some stocks of species that are not widely available in coordination with scientific research centers through a questionnaire that is sent to the Statistics Center. The latter has the authority to determine this indicator and send the questionnaire to the FAO.
FAO office (UAE) – Lionel Dabbadie	The next reporting for SDG 14.4.1 will be requested by the end of the year, if I understood well. What about the other SDG	Indicator 14.4.1 data must be reported on by end of 2021 or beginning of 2022 by collecting the data through the second questionnaire. Regarding indicator 14.6.1 and 14.b.1, these indicators are reported on through CCRF which is independent from other surveys and it is sent to countries

	14 indicators? I believe SDG 14.7.1 (included in CCRF questionnaire) should come even sooner?	every 2 years. These indicators are well reported on because this survey is well known by the countries. The data on these two indicators must be available by the end of this year.
UAE – Abeer Alaysah	As you said, the indicator is measured in the ee-zone or territorial sea. Are these two areas combine?	All national data is data for waters under sovereignty of the country which means data related to countries. Some countries do not have the definition of EEZ such as Mediterranean countries and Gulf countries. EEZ is defined by the countries and data must be based on this definition. Straddled stocks are not to be calculated in the national data and should be excluded from the reference list.
UAE – Abeer Alaysah	Do FAO validate the data sent by countries?	FAO do the process of validation with the countries, moreover, countries must validate the final figures for FAO.
Palestine – Noor Abd	The doctor referred to the reference list which is determined by the FAO. The question: Is this list standardized for all countries, or is a list provided for each country, and how can this list be obtained?	The reference list is established by the country according to monitoring priority and national considerations. So, it varies from country to another. FAO just provide recommendations to establish this list: >60 of national catch, stable for 5 years, include commercial species and species of cultural and economic interest.
Sudan – Magda Elgaali	If data do not seem to be irrational, does this refer to the methodology used by the country?	If these data were extracted from a published paper or national report, the data will be more accurate because it is validated by a scientific agency. If the data don't seem to be accurate, FAO reviews the data and do a consultation process with the country which will have the final say to validate this data.
Indicator 14.7.1		
ESCWA	For the indicator 14.7.1, the use of fisheries has increased through the years, however in the last chart, the use of fisheries decreases. Is there any relationship?	The increase is related to the contribution to the GDP due to the increase in the price of fishes and fisheries products in the world. The stocks decreased but the pricing and the contribution to the GDP have increased.
Indicators 15.1.1 – 15.2.1		

ESCWA	Does the FRA platform allow to download country reports? Who have access to the geospatial layers made available through the FRA platform?	Yes, in addition to global report, countries reports are available on the platform. They can be accessed interactively through the platform or downloaded as pdf files. Only the FRA National Correspondents and their collaborators can access the latest geospatial data and products that are made available through the FRA platform. The reason for limited access is that FRA is based on country reports. Therefore, the purpose of these tools is solely to give the national correspondents the possibility to access these layers to support their reporting and comparison of national estimates with those that can be derived from other sources.
Qatar - Khaled Alshatarat	Are Olive oil trees included?	FAO forest definition **excludes** tree stands in agricultural production systems, such as fruit tree plantations, oil palm plantations, olive orchards and agroforestry systems when crops are grown under tree cover.
Kuwait - Eman Behbehan	Which of the Gulf countries has a report on forest resources?	15 (C): Algeria, Comoros, Djibouti, Egypt, Iraq, Jordan, Lebanon, Mauritania, Morocco, Oman, Somalia, Sudan, Syrian Arab Republic, Tunisia and Yemen
ESCWA	If FAO do not receive within a year the data, FAO do the research and do the estimation and the data will be disseminated on the UNSD Global database as “E”?	In case a country did not nominate a National Correspondent or despite of our efforts we did not reach the national correspondent during the reporting process, then FAO will do a desk study that can be based on our own analysis, literature review or remote sensing data and products available on the platform and elsewhere.
Hassina Ali	Can the indicator be calculated according to the national definition of forests, which differs from the FAO definition?	FAO asks the countries to use the global definition and adjust the national figures accordingly. FAO emphasizes the need of using a global definition because there are more than 200 forest definitions in the world. If every country would use their own national definition, it would be impossible to draw any conclusion at the regional or global level. However, certain flexibility does exist to accommodate specific cases where the global definition cannot be used.
Algeria - Ghania Basseh	Are open forests in desert areas concerned with the definition?	They are included if they meet the biophysical part of the definition (Land spanning more than 0.5 hectares with trees higher than 5 meters and a canopy cover of more than 10 percent, or trees able to reach these thresholds in situ).

UAE – Abeer Alaysah	Does the FAO consider the planted forests such as mangroves in the GCC countries as part of the total forest area?	Forest under FRA reporting is divided into naturally regenerating forest and planted forest. The planted forest is divided into plantation forest which is intensively managed forest of 1 or 2 species equally spaced etc, and other planted forest which is not a naturally regenerated forest but a forest that may in its mature state resemble to a natural forest. Mangroves fall under the forest definition as displayed in the explanatory note number 6 "Includes areas with mangroves in tidal zones, regardless whether this area is classified as land area or not". If these trees you mentioned will reach the minimum height of 5 meters, the crown cover of 10% and the minimum size of 0.5 hectares then they will be considered as forest. Whether they will be plantation forest or planted forest depends on their composition and intensity of management.
Oman - Saif Al fulaiti	We found a proxy to the indicator, which is the ratio of mangrove forests to the type of wetland and protected areas. Can this indicator be used as a proxy indicator? Can palm trees be considered included in this indicator?	Mangrove trees and palm trees are included. Regarding the specifics in your country, a detailed review should be done to provide you with more detailed feedback. FAO forest definition includes areas with bamboo and palms if land use, height and canopy cover criteria are met and that the predominant land use is forestry.
Algeria – Wahid Tefiani	Is there any way to unify the classification systems and to adopt one definition?	The FRA uses a global, commonly agreed definition for forests and other land use classes. However, as those classes are few and quite coarse, they often do not meet the national needs. Therefore, FAO encourages countries to use national definition for their specific needs an facilitates conversion of the national classes to the FRA classes through a provision of a conversion matrix and expert support.

		In addition to provision of forestry specific support, FAO has also developed a standardized Land Cover Classification system, which provides a consistent framework for the classification and mapping of land cover. For more info, please see this link. FRA, as many other FAO data collection processes, is based on country reports. Therefore, in the context of FRA, each country is free to use a methodology which is best suited to their national circumstances and available resources to derive their data. However, in some specific cases FAO has also used a unified global methodology to derive national level estimates. An example of such a case is the Mountain Green Cover Index. For the latest reporting on this indicator, FAO generated the data using freely available geospatial products and sent the national reports to the countries for their validation. During the validation process, the countries could also replace the FAO generated estimates with their nationally derived figures. However, when it comes to reporting on forests, such an approach may not be advisable. Forests characteristics differ greatly in different countries and therefore, to meet the national needs, it is better to rely on nationally determined methodologies.
Morocco – Said Zarouali	For urban forests, there are some forests that extend to cities and there are natural forests. These forests meet all the criteria previously mentioned. Will it be included in the calculation of the indicator? There is a tree species such as argan, found naturally within forests, that fulfills the standard description proposed by the FAO. But in some areas these	The forest definition does not include land that is predominantly under agriculture or urban land use. It includes forest roads, firebreaks and other small open areas, forest in national parks, natural reserves, and other protected areas. Eventually the reply to your question depends on the setting. If the predominant land use is urban and the forest area is assigned to urban land use such as parks (not being a national park), then it would fall under the other land with tree cover. But if it is forested national park, for example, then it would count as forest area. Both naturally regenerating and planted forests should be reported if they meet the criteria of FAO forest definition. Regarding this case, a bilateral meeting is needed to have more details and resolve the issue.

	trees are planted. Is argan inserted in either case? Or only trees that are found in forested areas? If we take the total area of forest lands, it represents 12.7 compared to the national territory. However, if we take only productive forests that meet the definition the most, it represents 8.5. But there is another forest cover, but it is not included in the calculation of the index.	
Egypt – Maha Mohamad	What is the difference between planted forests and plantation forests? How to combine and put together the data coming from different sectors?	Planted forest is an umbrella for two types of forests that have been artificially regenerated: plantation forests, which are intensively managed, and other planted forests. More specifically, plantation forests are "intensively managed and meet ALL the following criteria at planting and stand maturity: one or two species, even age class, and regular spacing." (see https://fra-data.fao.org/definitions/en/tad#1b) The most important thing for data collection is the information exchange between all relevant parties. The data reported to FRA should also be communicated to the NSO.
Algeria – Ouidad Benghomrani	My question is regarding the percentage of forest cover in relation to the area of the national territory. Because Algeria is a very large country	I understand that in this case the problem is using a national level indicator does not necessarily reflect well the efforts that are being done at sub-national level. The investment made in one part of the country do not show in the indicator values as it is a relative measure which used the total land area as a denominator. But in the context of the FRA reporting, these efforts are visible because of the reporting of the actual forest area in a separate table. And, in addition to that,

	and most of it is made up of the Sahara (84%). We want to point out that at the local level, Algeria speaks of 11-12% for the northern region of the country. And if we put the area of forests in relation to the entire country, the percentage will be considerably small. This considers that Algeria does not have significant forest areas, but it is estimated at 4.2 million hectares.	countries are encouraged to be very explicit in describing their restorations efforts in the introductory part of the FRA report. In the future, it will also be possible to share any geospatial data that countries have.
Egypt – Maha Farouk	For indicator 15.2.1, Should there be documented certification of forests that are managed in a sustainable forest manner or are specific for a specific purpose? Are there any recommendations from FAO regarding the laws of foresting and exchange of information?	At the moment the data reported for the sub-indicator on certification comes from the certification bodies (FSC and PSC). In case you want to discuss specific details, please contact FAO. To my knowledge, we do not have such recommendations. Regarding the exchange of information on restoration, that is something that is very important in the context of the on-going UN decade of ecosystem restoration. In addition, FAO may start collecting data through FRA about restoration potentials and implementation in the future. Exchange of information between different focal points is of utmost importance. FAO has already conducted three regional workshops that brought together FRA National Correspondents, NSOs and UNFCCC focal points and will be conducting similar workshops with other countries, if necessary.
Algeria – Ghania Bessah	Should we take into consideration the natural reserve as per the national definitions or do we include the	The guidance for the FRA reporting distinguishes IUCN categories that would fall within the FRA reporting and the ones that do not. The protected area reporting in FRA includes IUCN Categories I a IV and excludes IUCN Categories V a VI.

	protected area as globally defined by RAMSAR and UNESCO?	

Annex 5: METADATA

Notes:

The following list of indicators is globally collected by FAO: 2.4.1, 2.5.1, 2.5.2, 2.a.1, 2.c.1, 5.a.1, 6.4.1, 6.4.2, 14.4.1, 14.7.1, 15.1.1, 15.2.1.
Only indicators 2.1.1 and 2.1.2 are collected via surveys.

Indicators	Data Source	Summary of Metadata	Questions
2.1.1 Prevalence of undernourishment (Unclear reference period)	Main source: HIES, HBS, LSMS, Dietary intake survey	Undernourishment is defined as the condition by which a person has access, on a regular basis, to the amount of food that are insufficient to provide the energy required for conducting a normal, healthy and active life, given his or her own dietary energy requirements. The ideal source of data to estimate the PoU would be a carefully designed and skillfully conducted individual dietary intake survey, in which actual daily food consumption, together with heights and weights for each surveyed individual, are repeatedly measured on a sample that is representative of the target population. Due to their cost, however, such surveys are rare. In principle, a well-designed household survey that collects information on food acquisitions might be sufficient to inform a reliable estimate of the	HIES Questionnaire

		Prevalence of Undernourishment in a population Computation method: The indicator is computed at the population level. To this aim, the population is represented by an "average" individual for which a probability distribution of the habitual daily dietary energy intake levels is modelled through a parametric probability density function	
2.1.2 Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES)	Main source: Food Insecurity Experience Scale survey module (FIES-SM) developed by FAO, or any other experience-based food security scale questionnaires	Food insecurity at moderate levels of severity is typically associated with the inability to regularly eat healthy, balanced diets. As such, high prevalence of food insecurity at moderate levels can be considered a predictor of various forms of diet-related health conditions in the population, associated with micronutrient deficiency and unbalanced diets. Severe levels of food insecurity, on the other hand, imply a high probability of reduced food intake and therefore can lead to more severe forms of undernutrition, including hunger.	Q1. During the last 12 MONTHS, was there a time when you (or any other adult in the household) were worried you would not have enough food to eat because of a lack of money or other resources? Q2. Still thinking about the last 12 MONTHS, was there a time when you (or any other adult in the household) were unable to eat healthy and nutritious food because of a lack of money or other resources? Q3. And was there a time when you (or any other adult in the household) ate only a few kinds of foods because of a lack of money or other resources? Q4. Was there a time when you (or any other adult in the household) had to skip a meal because there was not enough money or other resources to get food?

			Q5. Still thinking about the last 12 MONTHS, was there a time when you (or any other adult in the household) ate less than you thought you should because of a lack of money or other resources? Q6. And was there a time when your household ran out of food because of a lack of money or other resources? Q7. Was there a time when you (or any other adult in the household) were hungry but did not eat because there was not enough money or other resources for food? Q8. Finally, was there a time when you (or any other adult in the household) went without eating for a whole day because of a lack of money or other resources?
2.4.1 Proportion of agricultural area under productive and sustainable agriculture	Main source: Environmental monitoring systems, Farm survey, GIS, Agricultural surveys, Household surveys, Administrative data	Indicator 2.4.1= Area under productive and sustainable agriculture / Agricultural land area The numerator captures the three dimensions of sustainable production: environmental, economic and social. It corresponds to agricultural land area of the farms that satisfy sub-indicators selected across all three dimensions. The denominator in turn the sum of agricultural land area (as defined by FAO) utilized by agricultural holdings that are owned (excluding rented-out), rented-in, leased, sharecropped or	Survey module questionnaire in English and Arabic: http://www.fao.org/3/ca7399en/ca7399en.pdf

		borrowed. State or communal land used by farm holdings is not included.	
2.5.1 Number of plant and animal genetic resources for food and agriculture secured in either medium-or long-term conservation facilities	Main source: Administrative records	The plant component of the indicator is calculated as the total number of unique accessions of plant genetic resources secured in medium to long term conservation facilities. For the animal component the indicator is calculated as the number of local breeds with enough genetic material stored within gene bank collections allowing to reconstitute the breed in case of extinction.	2 components: FAO collects data though special online platform (WIEWS) 2.5.1a Plant genetic resources: http://www.fao.org/wiews FAO collects data though special online platform (DADIS) 2.5.1 b Animal genetic resources: http://www.fao.org/dad-is/data/en/
2.5.2 Proportion of local breeds classified as being risk of extinction	Main source: Administrative records (Ministry of agriculture)	The indicator presents the percentage of local livestock breeds among local breeds with known risk status classified as being at risk of extinctions at a certain moment in time, as well as the trends for this percentage.	FAO collects data though special online platform (DADIS) Looks at live animals – need breed population sized survey – livestock censuses: http://www.fao.org/dad-is/data/en/
2.a.1 The agriculture orientation index for government expenditure	Main source: Data on government expenditure (Administrative data), Data on agriculture value-added and GDP (mix of survey, census and administrative data (the ministry of finance (or other	The Agriculture Orientation Index (AOI) for Government Expenditures is defined as the Agriculture share of Government Expenditure, divided by the Agriculture value added share of GDP, where Agriculture refers to the agriculture, forestry, fishing and hunting sector. The measure is a currency-free index, calculated as the ratio of these two shares. National governments are requested to compile Government	FAO sends Government Expenditure in Agriculture questionnaire (for collecting data from countries) available in English here: http://www.fao.org/sustainable-development-goals/indicators/2a1/en/ National accounts

	central planning agency), or the ministry of agriculture))	Expenditures according to the Government Finance Statistics (GFS) and the Classification of the Functions of Government (COFOG), and Agriculture value added share of GDP according to the System of National Accounts (SNA). AOI= Agriculture share of government expenditures / Agriculture value added share of GDP	
2.c.1 Indicator of food price anomalies	Main source: Administrative records	The indicator of food price anomalies (IFPA) identifies market prices that are abnormally high. The IFPA relies on a weighted compound growth rate that accounts for both within year and across year price growth. The indicator directly evaluates growth in prices over a particular month over many years, taking into account seasonality in agricultural markets and inflation, allowing to answer the question of whether or not a change in price is abnormal for any particular period.	The Food Price Monitoring and Analysis (FPMA) site contains latest information and analysis on domestic prices of basic foods mainly in developing countries, complementing FAO analysis on international market https://fpma.apps.fao.org/giews/food-prices/tool/public/#/home
6.4.1 Change in water-use efficiency over time	Main source: Administrative records – (ministries of water resources, agriculture, or environment)	Water use efficiency is computed as the sum of the three sectors: 1. agriculture; forestry; fishing (ISIC A), hereinafter “agriculture”; 2. mining and quarrying; manufacturing; electricity, gas, steam and air conditioning supply; constructions (ISIC B, C, D and F), hereinafter “MIMEC”; 3. all the service	FAO Aquastat questionnaire (for collecting data from countries) will be translated into Arabic in 2021: www.fao.org/aquastat/en/

		sectors (ISIC E and ISIC G-T), hereinafter "services".	
6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources	Main source: Administrative records (ministries of water resources, agriculture, or environment)	The level of water stress: freshwater withdrawal as a proportion of available freshwater resources is the ratio between total freshwater withdrawn by all major sectors and total renewable freshwater resources, after taking into account environmental flow requirements. Main sectors, as defined by ISIC standards, include agriculture; forestry and fishing; manufacturing; electricity industry; and services. This indicator is also known as water withdrawal intensity.	FAO Aquastat questionnaire will be translated into Arabic in 2021: www.fao.org/aquastat/en/
14.4.1 Proportion of fish stocks within biologically sustainable levels	Main source: Administrative records (Ministry of Fisheries and/or Agriculture)	The indicator, Proportion of marine fish stocks within biologically sustainable levels, measures the sustainability of the world's marine capture fisheries by their abundance. A fish stock whose abundance is at or greater than the level that can produce the maximum sustainable yield (MSY) is classified as biologically sustainable. In contrast, when abundance falls below the MSY level, the stock is considered biologically unsustainable. MSY is defined as the greatest amount of catch that can be harvested continuously from a stock under constant and current	FAO questionnaire for collecting data from countries only available in English currently – was calculated originally at global level – complex indicator based on different parameters and sources, need specialized expertise

		environmental conditions (e.g., habitat, water conditions, species composition and interactions, and anything that could affect birth, growth, or death rates of the stock) without affecting the long-term productivity of the stock. The indicator measures the sustainability of fish resources based a good balance between human use and ecological conservation. MSY-based reference points are the most common type of reference points used in fisheries management today. This is primarily because, for decades, reference points from surplus production models have most often been set based on the concept of MSY and they are the basic benchmarks for the sustainability of fisheries set by the UN Convention on the Law of the Sea (UNCLOS, Article 61(3)). The indicator is calculated as the number of stocks with sustainable status divided by the number of stocks with known status in the reference list. This proportion is calculated based on stock numbers, without weighting either by its production volume or stock abundance; that is, every fish stock is	

		considered to have the same importance.	
14.7.1 Sustainable fisheries as a proportion of GDP in small island developing States, least developed countries and all countries	Main source: Administrative records	This indicator expresses the value added of sustainable marine capture fisheries as a proportion of Gross Domestic Product (GDP).	Based on 14.4.1 in relation to national accounts information
15.1.1 Forest area as a proportion of total land area	Main source: Administrative records – Forest inventories	The indicator provides a measure of the relative extent of forest in a country. The availability of accurate data on a country's forest area is a key element for forest policy and planning within the context of sustainable development. Changes in forest area reflect the demand for land for other uses and may help identify unsustainable practices in the forestry and agricultural sector. Forest area as percentage of total land area may be used as a rough proxy for the extent to which the forests in a country are being conserved or restored, but it is only partly a measure for the extent to which they are sustainably managed. Forest area (reference year) / Land area (2015) * 100	Based on global resources assessment questionnaire – FRA digital platform : http://www.fao.org/forest-resources-assessment/en/

15.2.1 Progress towards sustainable forest management	Main source: Administrative records – Forest inventories	The indicator is composed of five sub-indicators that measure progress towards all dimensions of sustainable forest management. The environmental values of forests are covered by three sub-indicators focused on the extension of forest area, biomass within the forest area and protection and maintenance of biological diversity, and of natural and associated cultural resources. Social and economic values of forests are reconciled with environmental values through sustainable management plans. The subindicator provides further qualification to the management of forest areas, by assessing areas which are independently verified for compliance with a set of national or international standards. The sub-indicators are: 1. Forest area annual net change rate 2. Above-ground biomass stock in forest 3. Proportion of forest area located within legally established protect areas 4. Proportion of forest area under a long-term forest management plan 5. Forest area under an independently verified forest management certification scheme A dashboard is used to assess progress related to the five sub-indicators. The	Based on global resources assessment questionnaire – FRA digital platform : http://www.fao.org/forest-resources-assessment/en/

		adoption of the dashboard approach aims at ensuring consideration of all dimensions of sustainable forest management and provides for clear view of areas where progress has been achieved.	

Other Indicators:

Agriculture based survey indicators – for Agriculture survey includes these questions (FAO revising questions – to be introduced later)

2.3.1 Volume of production per labour unit by classes of farming/pastoral/forestry enterprise size

2.3.2 Average income of small-scale food producers, by sex and indigenous status

12.3.1 (a) Food loss index – FAO – Global regional data – no country data

15.4.2 Mountain Green Cover Index – calc through geospatial data validated by NSOs - deadline one month to confirm

FAO – Code of conduct to fishery questionnaire CCRF – every two years

14.6.1 Degree of implementation of international instruments aiming to combat illegal, unreported and unregulated fishing

14.b.1 Degree of application of a legal/regulatory/policy/institutional framework which recognizes and protects access rights for small-scale fisheries